



Vaidya Yoga Ratnavali

VAIDYA YOGA RATNAVALI

(FORMULARY OF AYURVEDIC MEDICINES)



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P R E F A C E

Vaidya Yoga Ratnavali compiled by Vaidya Mulugu Ramalingayya Garu in Telugu and later translated in the year 1953 into English by his son Ayurvedacharya, Dr. M. Vishveshwara Shastri, H.P.I.M., and published by us is known to the public. The book has been published by us in English, Telugu and Tamil for the use of Practitioners knowing these languages. In the English version the names of the drugs were given in Sanskrit but it is found that such a rendering would not help practitioners who are not conversant with Sanskrit terminology.

In the present edition, the names of the drugs have been translated into common current English terms. Wherever the English terms are not available, the Latin botanical names have been used. The object is, that the Practitioners who are not familiar with the Ayurvedic terminology and yet, interested to know the prepared medicines of Ayurveda and their method of preparation, may understand better from this book. It is with this view that, even the indications of the medicines, in diseases are given in English.

A glossary, giving the equivalents in South Indian Languages and in Hindi, is prepared and appended to

this book. The readers may get the correct equivalents in their own languages for the English and Latin terms used in the formulary. The publishers' object is that, these common Ayurvedic medicines widely used by the practitioners of Ayurveda, may also be known to the Practitioners of other systems of medicines. Therefore the formulae, the methods of preparation, the dosage and the indications of these preparations are given. The glossary explains briefly, the parts used, so that the reader may be familiarised with the drugs.

The publishers are thankful to the Medical Superintendents of the Pharmacy, and to Shri S. Usman Ali, M.Sc., the Botanist of The Captain Srinivasa Murti Research Institute, who have taken considerable trouble in bringing out this book. They have done the work honorarily and out of the hours of duty.

It is hoped that this book will find a wider reading public.

IMPCOPS
(PUBLISHERS)

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SECTION I

ARKA

Concept and Terminology :

Arka are distilled essences, which contain the volatile constituents of the drugs used in the preparation, in a medium of water and they are equivalent to the 'aquae' or 'waters' of the western Pharmacopoeia, which are prepared in the same way.

Preparation :

Arka are prepared by a process of distillation of water soaked raw drugs. The volatile principles which are evolved admixed with water vapour are condensed and taken.

Equipments required :

1. The essential drugs from which the arka is to be obtained.
2. Bottles or large capacity for collection of the distillate.
3. An assembly of apparatus as described below or modifications thereof for distillation. (The commonest type in use is being described here, with some suggestions for improvement of the apparatus which will facilitate efficient distillation of the medicine.)

Apparatus for distillation :

The still consists of a basal receptacle to contain the drugs, and a cover with an exhaust tube which is con-

veniently bent to drain the distillate into the bottle. A cupular reservoir is provided at the region where the exhaust leaves the lid portion.

The receptacle of the retort may be an earthen pot or preferably a metallic one. When made of metals like brass or copper, the interior is tinned. Iron should not be used because it gets rusted and corroded in a short period. Stainless steel stills are excellent. It is advisable to provide a perforated false bottom in the receptacle to keep the drug intended for extraction to avoid charring. The cupular reservoir over the lid is filled with cold water during distillation and it serves as a sort of a crude type of condensor. This crude device could be replaced by a good condensor in the form of a water jacket around exhaust tube. Or even a spiral type of condensor could be provided. Good condensers ensure complete condensation of the vapours and the quality is ensured. Cold water should be circulated continuously through the condensor during distillation.

Process of preparation :

The drugs are crushed into coarse particles and soaked in the prescribed quantity of water for about 24 hours and then put along with the water into the still for distillation.

The lid is tightly placed and sealed around to prevent vapours from escaping. For the purpose of sealing, a cloth ribbon with a paste of black gram is used. Heat is applied to the drug mixture and the distillate is collected in large bottles and mixed well to ensure uniform concentration of the medicine because the first distillate is much concentrated as compared to that collected at the end of the process when the drugs are depleted of the medicinal principles. A continuous water current

should be maintained in the condensor. When a cupular type of condensor is used, water is replaced by cool water as and when it becomes warmed up. The vessel or bottle in which the distillate is collected is also placed in a trough containing cold water. (In large scale preparation, large stills which are heated by super heated steam are employed for distillation).

The end of the process of preparation is marked by the escape of dark fumes, from the exhaust. Further attempts to heat and collect the remnants of condensate should not be made once this phenomenon is noticed. Usually the volume of the distillate is 70% of the total volume of the drug and water mixture taken for distillation. The whole of the distillate should be mixed to make a preparation of uniform concentration.

Storage and Usage of Arka :

Arka should be stored in tightly stoppered glass bottles. Any arka if kept open and exposed to air will lose its volatile medicinal principles. Some physicians remove the oil droplets in the arka and consider the oil as undesirable. Usually, the bottle is well shaken before use to mix the oil droplets with the arka. These oil droplets are in reality medicinally important.

Arka are mixed with equal quantity of water before use.

1. AJAMODA ARKA (I.M.P.C.P.)

Drugs required :

1. Ajowan fruits	..	1350 gms.
2. Water	..	11 litres.

Preparation :

Crush Ajowan fruits into a coarse powder and soak in the water for twenty four hours. Put the drug-water mixture in the distillation apparatus and extract arka.

Action and uses :

Appetiser and Digestive. Astringent and absorbs phlegm. Used in Diarrhoea and digestive disorders in children and adults. Relieves cough and fever in children.

Dose :

Given internally ; 15 to 30 ml. with an equal volume of water in case of adults. Once to thrice a day 5 to 10 ml. with water or breast milk once or twice a day for infants and children.

2. KARPOORADI ARKA (I.M.P.C.P.)

Drugs required :

1. Camphor pure	..	140 gms.
2. Ajowan fruits	..	1350 gms.
3. Water	..	14.5 litres.

Preparation :

Coarsely powder the Ajowan fruits and soak in the water for 24 hours. Put the soaked Ajowan powder with water into the distilling apparatus. Prepare arka. add powdered camphor & mix well. (If camphor is put into the still with Ajowan powder, the sublimated camphor blocks the condensor and hinders distillation. So, camphor is added to the Ajowan distillate obtained).

Action and Uses :

Astringent, dries up fluids and hardens stools ; improves appetite. Digestive, carminative and stimulant. Used in cholera and diarrhoea ; sometimes used in combination with medicines like Karpooora arishta or Baboolarishta. Also used in the irritation of the buccal mucosa.

Dose :

Given orally ; 15 to 30 ml. with or without an equal volume of water. twice or thrice a day according to the condition.

SECTION II

ASAVA AND ARISHTA

Concept and Terminology :

Asava or Arishta are alcoholic medicaments which are prepared by allowing the juices or decoctions of raw drugs mixed with sugars to undergo fermentation. At the final stage the prepared medicine is moderately alcoholic (upto 12% by volume) and mostly sweetish in taste with slight acidity and agreeable aroma.

Though Asava and Arishta are essentially similar in nature, the asava are prepared from the juices of fresh plants or water soaked dry drugs where as the arishta are prepared from a decoction of the drugs.

In ancient sanskrit literature * which deals with the medicinal preparations these two terms asava and arishta are considered synonymous and freely interchangeable. In later works ** the distinction was made between the two types and the terminology was thereafter tenaciously adhere to.

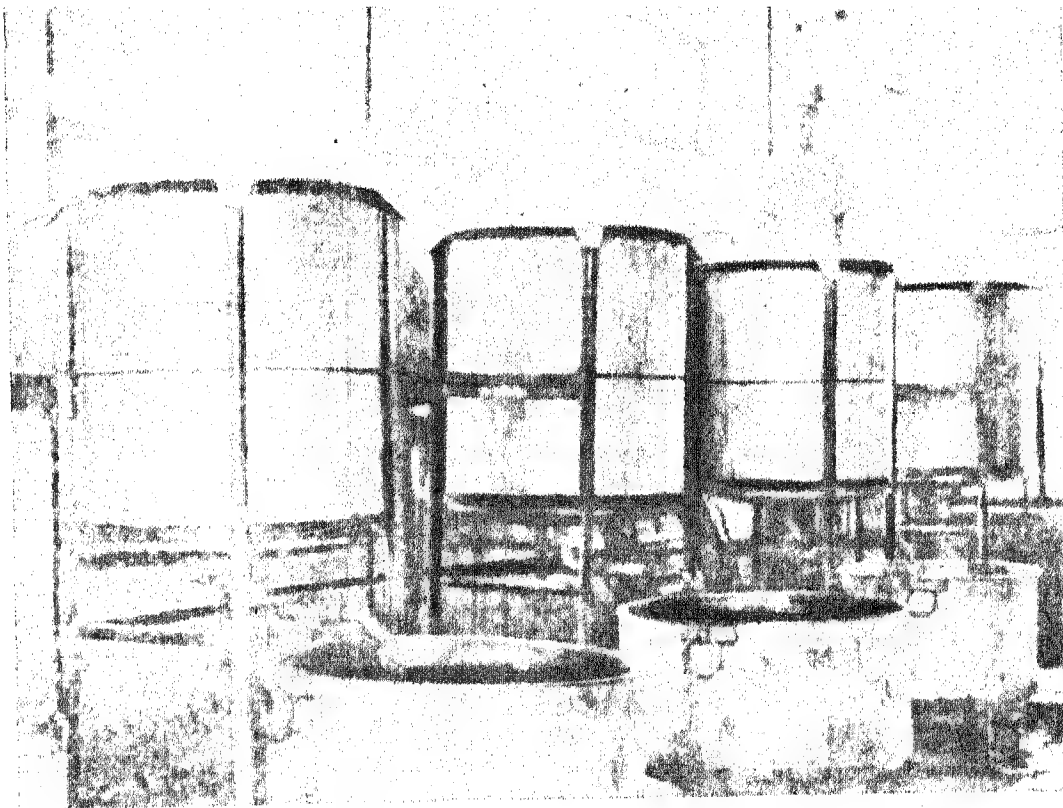
Preparation :

The equipments :—The basic equipments are :—

1. An earthen pot sufficiently large and strong with glazed exterior or a glazed porcelain jar of suitable size ; a lid of correct size to close the vessel.
2. A cloth ribbon to seal the vessel.
3. A paddle like stirrer.

* Charaka, Sushruta & Vagbhata.

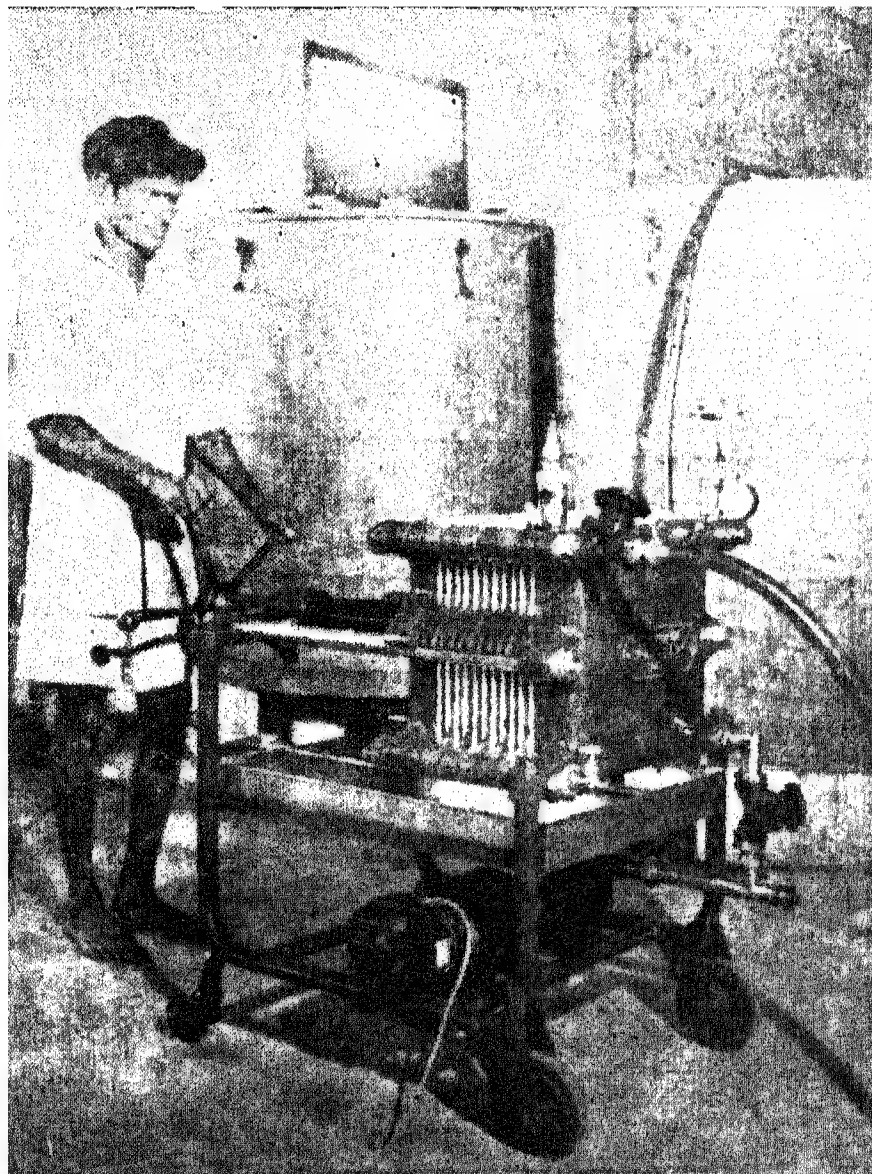
** Bhavaprakasha, Sarngadhara and Gadanigraha.



Boiling kwatha (Decoctions) in steam coiled vessels



Fermenting asava and arishta in wooden vats



Filtering asava and arishta through filter press

4. A clean cloth of fine and strong texture for filtering.

5. A vessel to keep the juices or boil the drugs.

6. The necessary drugs for the preparation of the particular asava or arishta.

In factories where these alcoholic medicaments are manufactured, the fermentation is carried out in huge wooden vats with wooden covers. The vat is made air tight. The filtration is carried out by electric filter presses with filter sheets which efficiently separate the suspended particles and isolate clear medicine. The powdering, grinding and mixing are done by mills, pulverisers and mixing machines. The decoctions are prepared in large steam jacketed boilers, heated by superheated steam under pressure.

The drugs: The drugs are divided into four sections as given below according to their particular roll in the process.

(a) **The main drugs** from which the extract or decoction is taken as the case may be. These are the drugs which are pharmacologically and therapeutically much important in the given medicine and the name of the medicine is derived from these drugs denoting their importance.

(b) **Flavouring agents:** These drugs besides contributing to the flavour of the medicine have their own pharmacological action also.

(c) **The fermentation initiator:** This is the drug which provides the inculum for the fermentation to start.

(d) **The medium of sugars** that are actually fermented.

Process of Preparation :

The basic drugs from which the extract is to be prepared are first cleaned and rinsed in water to get rid of dirt. In the case of fresh plants they are cleaned, pulverised and pressed for collection of juice. If the drug is dry and is to be used in the preparation of asava it is coarsely crushed and added to the water to which the prescribed quantity of honey, jaggery and/or sugar are added. If it is an arishta, a decoction is obtained by boiling the drugs in the specified volume of water. The water used should be clean, clear and potable.

When the extracts are obtained, the sugar, jaggery and/or honey are added as directed in the recipe and completely dissolved. Sometimes any one or more of these sugary substances are omitted if so directed in the recipe. In the case of sugar, it should be pure white cane sugar. The jaggery should be of sweet taste and atleast an year old. The honey should be genuine. The flavouring agents are coarsely powdered and added to the sweetened extract. Too fine a powder of the flavouring agent is undesirable as it causes sedimentation in the prepared medicine and its filtration is difficult. Even when the recipe does not prescribe the addition of any flavouring agent, usually they are added in the same proportion as for other asava or arishta.

The earthen pot intended for keeping the medicine to ferment is tested for weak spots and cracks and similarly a lid is also chosen. The internal surfaces of the pot and the lid are wiped with a clean dry cloth and cow's ghee is smeared on this surface to prevent the oozing out of the contents when poured and kept for fermentation. The pot should be perfectly dry before ghee is smeared and if it be moist ghee will not stick and penetrate the pores. The infiltration of the pot besides pre-

venting oozing, strengthens the pot also. As indicated earlier, glazed porcelain ware may be used instead of earthen ware.

When the pot or the jar is ready, the sweetened and flavoured drug extract is poured into it upto $\frac{3}{4}$ of the capacity. This unfilled space provides room for the fermenting liquid when it rises up frothing and evolving a large amount of gases. Otherwise the medium may damage the container and flow out.

Now, the inoculum is to be added to initiate fermentation. As we know, the process of fermentation necessitates the presence of fermenting micro-organisms known as yeasts. In the preparation of alcoholic medicaments in the Ayurvedic Systems, the inoculum of yeasts comes from the flowers which contain the wild species of yeast. Only the fire flame bush flowers are prescribed for use. These flowers are nectariferous and highly tanniniferous. The flowers are obtained dry from the market and contain the yeast spores in the dry nectariferous region. The flowers of the fire flame bush serve the same purpose as do hops in the brewing.

The presence of tannin both in hops and these flowers produces a conducive environment for yeast growth. The flowers are added and the contents are stirred well to distribute the inoculum of yeast. Apart from the fire flame flowers, other drugs like honey and raisins also contain wild yeasts. When fire flame flowers are not used in some preparations, the inoculum of yeasts either from the Mahua flower, the honey or raisins suffice for initiating the process of fermentation. The yeasts multiply rapidly in number by division in a short time.

Finally the vessel is closed and sealed. Sealing is done by winding around a long ribbon of cloth smeared with clay on one surface. When sealing the blank surface of the ribbon should line the rim of the vessel and lid and the clay side should be external. After sealing, the vessel is placed in a dark place without much circulation of air. It may be kept in a grain store in a heap of grain or in a pit in the soil. Soft packing of straw should be provided around the vessel to prevent breakage by any force.

The vessel is left undisturbed for a month and then opened. The medicine is filtered and taken for use. If the filtered medicine shows rapid and abundant sedimentation, it is allowed to stand for a few days and again filtered to separate the sediment. Even though the pot is opened after a month and the medicine is taken in usual practice, 7 to 10 days are enough in the hot tropical climate and the long period of 30 days is allowed in cool temperate climate where biological activity is at its law.

Storage :

The filtered medicine is stored in tightly stoppered glass bottles and taken for use whenever necessary. The asava and arishta keep good for any length of time and actually the medicinal value of the preparation is said to increase with time. Any asava or arishta if it shows signs of mold development at any stage should be rejected as unfit for use.

Usage :

Asava or arishta are mixed with an equal volume of water before taking. The container should be kept well closed as these sweet medicines attract animals like flies and ants.

3. ABHAYARISHTA

(Bhaishajyaratnavali : Arsorogadhikara)

Drugs required :

	gms.
1. Rind of chebulic myrobalan ..	5000
2. Raisins ..	2500
3. Embelia fruits ..	500
4. Mahua flowers ..	2500
5. Cane jaggery ..	5000
6. Small caltrops ..	100
7. Turpith roots ..	100
8. Coriander seeds ..	100
9. Fire flame flowers ..	100
10. Colocynth roots ..	100
11. Long pepper roots ..	100
12. Fennel seeds ..	100
13. Dry ginger ..	100
14. Croton root ..	100
15. Gum of red silk cotton tree ..	100
16. Water (Litres) ..	50

Preparation :

Crush Nos. 1 and 3, add them together with 2 and 4 to the water, and prepare a decoction reducing it to $\frac{1}{4}$. When the decoction is cooled, filter and dissolve the jaggery. Pour the fluid into the fermentation vessel. Add coarse powders of drugs 6 to 15 and mix. Seal, set aside for fermentation and obtain arishta after the prescribed period.

Action and uses :

Mildly laxative and diuretic. Improves appetite. Used in haemorrhoids, ascites, oedema, and in constipation. Given in piles at bed time.

Dose :

15 to 30 ml. mixed with water ; twice or thrice a day.

4. AMRITHA ARISHTA

(Bhaishajyaratnavali : Jwaradhikara)

Drugs required :

	gms.
1. Tinospora roots and thick stems : ..	5000
2. The ten roots ..	5000
3. Cane Jaggery old ..	15000
4. Nigella seeds ..	800
5. Mollugo cerviana herb ..	100
6. Dita bark ..	50
7. Three pungents (each) ..	50
8. Nagakeshar stamens ..	50
9. Picrorrhiza ..	50
10. Atis root ..	50
11. Tellichery seeds ..	50
12. Nut grass tubers ..	50
13. Water (Litres) ..	50

Preparation :

Take Nos. 1 and 2, clean, crush and boil with 50 litres of water until the water is reduced to $\frac{1}{4}$ volume. Cool, filter and dissolve jaggery in the decoction. Pour the solution in the fermentation vessel and add powders of drugs 4 to 12 and mix. Keep to ferment and obtain arishta.

Action and uses :

Antipyretic and antiperiodic. Increases resistance to infections and acts as a stimulant. Used in intermittent and malarial fevers and also in other types of chronic fevers. Useful also in enteric group of fevers along with Dasamoolarishta and sometimes mixed with musk.

Dose :

15 to 30 ml. twice or thrice a day.

5. ARAVINDA ASAVA

(Bhaishajyaratnavali : Balarogathikara)

Drugs required :

	gms.
1. Lotus flowers	50
2. Vetiver (Kush kush)	50
3. Root of small Kashmiri tree	50
4. Rhizome of Blue water lily	50
5. Indian madder	50
6. Cardamoms	50
7. Sida roots	50
8. Indian spike nard root (Nardus root)	50
9. Nut grass tubers	50
10. Indian sarsaparilla	50
11. Three myrobalans each	50
12. Sweet flag	50
13. Round Zedoary	50
14. Black turpith	50
15. Indigo roots	50

	gms.
16. Bitter hair flower (wild snake gourd) ..	50
17. Mollugo cerviana—herb ..	50
18. Arjuna bark ..	50
19. Mahua flowers ..	50
20. Liquorice root ..	50
21. Orange jessamine leaves ..	50
22. Raisins ..	1000
23. Fire flame flowers ..	800
24. Sugar (cane sugar) ..	5000
25. Honey ..	2500
26. Water (Litres) ..	25

Preparation :

Take Nos. 1 to 22 clean crush and add to No. 26 and mix. Then add and dissolve 24 and 25. Pour in fermentation vessel and add 23 and seal. Set aside for fermentation and obtain asava after prescribed period.

Action and uses :

Improves appetite and digestion. Carminative, and restorative. Cools the system. General tonic to children.

Dose :

15 to 30 ml. twice or thrice a day.

6. ARJUNARISHTA

(Bhaishajyaratnavali : Hridrogadhikara)

Drugs required :

	gms.
1. Arjun bark ..	5000
2. Raisins ..	2500

	gms.
3. Mahua flowers ..	1000
4. Fire flame flowers ..	1000
5. Cane jaggery old ..	5000
6. Water (Litres) ..	50

Preparation :

Take drug No. 1 and crush. Add 2 and 3 to this boil in water. Reduce to $\frac{1}{4}$ of the volume and filter the decoction. Dissolve No. 5 and add No. 4. Transfer the whole mixture to the fermenting vessel and take arishta after the prescribed period of thirty days.

Action and uses :

Cardiac tonic. Useful in all heart diseases and diseases of the respiratory system. Blood purifier.

Dose :

10 to 25 ml., twice or thrice a day.

7. ASWAGANDHARISHTA**Drugs required :**

	gms.
1. Withania roots ..	2500
2. Black musale ..	1000
3. Indian madder ..	500
4. Chebulic myrobalan ..	500
5. Turmeric ..	500
6. False calumba (ceylon calumba) ..	500
7. Liquorice root ..	500
8. Lesser galangal ..	500

	gms.
9. French honey suckle tuber ..	500
10. Arjun bark ..	500
11. Nut grass tubers ..	500
12. Black turpith ..	500
13. Sandal wood ..	400
14. Red sanders wood ..	400
15. Indian sarsaparilla ..	400
16. Black sarsaparilla ..	400
17. Sweet flag ..	400
18. Lead wort root ..	400
19. Fire flame flowers ..	800
20. Honey ..	10000
21. Three pungents total ..	100
22. Three aromatics total ..	200
23. Flowers of Roxburgh's tree of beauty ..	200
24. Nagkeshar stamens ..	100
25. Water (Litres) ..	100

Preparation :

Take drugs Nos. 1 to 18, crush and prepare decoction in 25 and concentrate it to $\frac{1}{2}$ of volume. Cool the decoction and filter. Add to it the powders of (coarse) 21, 22 and 23. Mix with it 19 and 20. Keep to ferment and prepare arishta.

Action and uses :

Useful in wasting diseases and run down conditions when given with kooshmanda lehya. Used in tuberculosis, nervous disorders etc. Improves memory. Used in epilepsy, insanity, and much in sterility and haemorrhoids. In sterility it is given with 'satavaree rasayana'. In burning sensation of the soles and palm, it is given with 'Chandana asava'. In diseases of the ner-

vous system and mental disorders, it should be used for a longer period.

Dose :

15 to 31 ml. Twice or thrice a day.

8. ASOKARISHTA

(Bhaishajyaratnavali : Streerogadhikara)

Drugs required :

	gms.
1. Asoka bark	.. 5000
2. Cane jaggery	.. 10000
3. Fire flame flowers	.. 800
4. Nigella seeds	.. 50
5. Nut grass tubers	.. 50
6. Dry ginger	.. 50
7. False calumba (ceylon calumba)	.. 50
8. Water lily rhizome	.. 50
9. Three myrobalans each	.. 50
10. Mango seed kernal	.. 50
11. Cumin seeds	.. 50
12. Adhatoda leaves	.. 50
13. Sandal wood	.. 50
14. Water	(Litres) .. 50

Preparation :

Take No. 1, crush and prepare decoction concentrated to $\frac{1}{4}$ volume. Cool and filter the decoction and dissolve the jaggery in it. Add coarse powders of drugs 4 to 13. Then mix No. 3 in it. Keep to ferment and obtain arishta.

Action and uses :

Tones up the uterine muscular system. Regularizes the flow of menstrual discharge. Improves appetite and digestion. Astringent. Useful in menstrual disorders. menorrhagia, metrorrhagia, amenorrhoea, dysmenorrhoea and female sterility, inclusive of leucorrhoea. Used with Asokadivati in dysmenorrhoea and amenorrhoea. Used with Aswagandharishta and Satavaree rasayana in female—sterility. Used with Babbularishta in monorrhagia and metrorrhagia. Used with calx of Mica (Abrakha bhasma), Iron pyrites, Load stone, and tinospora starch and powders of cloves, himalayan silver fir leaves, palm jaggery, withania roots and asparagus roots in leucorrhoea.

Dose :

15 to 30 ml. twice or thrice a day.

9. AYASKRITHI

(Ashtanga Hridya : Prameha Chikitsa)

Drugs required :

	Kg
1. Madras kino wood	1
2. Punjab kino wood	1
3. Himalayan silver birch bark	1
4. Arjun bark	1
5. Indian beech tree bark	1
6. Black catechu wood	1
7. White catechu (Acacia suma) wood	1
8. Siris bark	1
9. Rose wood	1

		Kgs.
10.	Gymnema sylvestree (Mesha sringi)	1
11.	Sandal wood	1
12.	Red sanders	1
13.	False calumba stem	1
14.	Palymrah palm roots	1
15.	Bengal kino wood	1
16.	Eagle wood (Aloe wood)	1
17.	Teak wood	1
18.	Sal tree wood	1
19.	Raw areca nuts	1
20.	White rose apple wood (Dhava Eugenia hemisphaerica)	1
21.	Tellicherry bark	1
22.	White damar wood (Indian copal wood)	1
23.	Indian trumpet flower wood	1
24.	Water (Litres)	100
25.	Jaggery	10
26.	Honey	1.50
		gms.
27.	Tellicherry seeds	50
28.	Bow string hemp rhizome	50
29.	Beetle killer roots	50
30.	Picrorhiza	50
31.	Black pepper	50
32.	Atis roots	50
33.	Square spurge stems	50
34.	Cardamoms	50
35.	False pareira brava	50
36.	Cumin seeds	50
37.	Common emetic nut	50
38.	Ajowan seeds	50
39.	White mustard	50
40.	Sweet flag	50

	gms.
41. Nigella seeds	.. 50
42. Asafoetida	.. 50
43. Embelia fruits	.. 50
44. Cleome gynandra herb	.. 50
45. Long pepper	.. 50
46. Long pepper roots	.. 50
47. Black pepper roots	.. 50
48. Lead wort roots	.. 50
49. Dry ginger	.. 50
50. Iron filings	.. 800
	Kg.
51. Black catechu wood	.. 2½
52. Fire flame flowers	.. 1

Preparation :

Boil drugs 1 to 23 in Water (24) and reduce decoction to $\frac{1}{2}$. Add and dissolve 25 and 26 in it. Then add to it, the coarse powders of 27 to 49. Fry the iron filings or sheet in fire of 52 and dip in the mixture. Repeat this until the iron is consumed. Usually the iron filings are put in the decoction and drug 51 is added to decoction when it is prepared. The latter is mostly practised. Finally add fire flame flowers and seal in the fermentation vessel and take the medicine after a month.

Action and uses :

Hypoglycaemic, Hematinic, and astringent. Useful in diabetes (diabetes mellitus) anaemia, chronic dysentery and also in cases of obesity and intestinal worms.

Dose :

10 to 30 ml. Given with an equal quantity of water twice daily.

10. **BALA ARISHTA**

(Bhaishajyaratnavali : Vatavyadhadhikara)

Drugs required :

	gms.
1. Sida roots (Bala roots)	.. 5000
2. Withania roots	.. 5000
3. Cane jaggery old	.. 15000
4. Fire flame flowers	.. 800
5. Alligator yam	.. 100
6. Castor roots	.. 100
7. Lesser galangal	.. 50
8. Cardamoms	.. 50
9. Field bind weed	.. 50
10. Cloves	.. 50
11. Vetiver	.. 50
12. Small caltrops	.. 50
13. Water	(Litres) .. 50

Preparation :

Crush 1 and 2, boil in 13, and concentrate it to $\frac{1}{4}$. Filter and cool the decoction, dissolve jaggery, and coarse powders of 5 to 12 and mix well. Add No. 4 and stir the fluid. Keep to ferment and obtain arishta.

Action and uses :

Useful in nervous debility and disorders. Rejuvenating and useful in rheumatic complaints.

Dose :

15 to 30 ml. twice or thrice daily.

11. BABBULA ARISHTA

(Sarangadhara Samhita : Madhyama Khanda)

Drugs required :

	gms.
1. Bark of gum arabic tree ..	10000
2. Cane jaggery old ..	15000
3. Fire flame flowers ..	800
4. Long pepper ..	100
5. Nut meg ..	50
6. Cubebs (star anise according to some) ..	50
7. Cardamoms ..	50
8. Cinnamon bark ..	50
9. Cinnamon leaves ..	50
10. Nagakeshar stamens ..	50
11. Cloves ..	50
12. Pepper ..	50
13. Water (Litres) ..	50

Preparation :

Prepare decoction of in 13 and concentrate to $\frac{1}{4}$. Cool and filter. Dissolve 2 in the decoction. Mix coarse powders of 4 to 12 and add 3 and stir the decoction. Keep to ferment and obtain arishta.

Action and uses :

Improves appetite, digestive, carminative astringent and haemostatic. **Blood purifying.** Used in skin diseases and blood impurities, metabolic disorders, urinary disorders, diarrhoeas, bronchitis and coughs. Diluted with 4 to 8 volumes of water, it is useful in urethral irrigation in gonorrhoea.

Dose :

8 to 25 ml. twice or thrice a day.

12. BHRINGARAJASAVA

(Gadagnigraha : Asavadhikara)

Drugs required :

	Litres.
1. Juice of Eclipta prostrata (Fresh) ..	12.5
2. Cane jaggery old ..	10
	gms.
3. Chebulic myrobalan (without seeds) ..	400
4. Long pepper ..	100
5. Nut meg ..	100
6. Cloves ..	100
7. Cinnamon bark ..	100
8. Cardamom ..	100
9. Cinnamon leaves ..	100
10. Nagakeshar stamens ..	100

Preparation :

Dissolve jaggery in the juice of Eclipta prostrata and add coarse powders of drugs three to ten and mix. Seal in the fermentation vessel and obtain the Asava after the prescribed period of one month (The Sanskrit Text says that the drug powders should be put into the pot after 15 days. But, in practice the powders are added right in the beginning before the pot is sealed).

Action and uses :

In wasting diseases, coughs, anaemia and bronchitis. Also used in sterility in women. Useful also in chronic fevers and enlargement of the liver and spleen, with Chitrakadi vati.

Dose :

15 to 30 ml. Twice or thrice a day.

13. CHANDANASAVA

(Bhaishajyaratnavali : Sukramehadikara)

Drugs required :

	gms.
1. Sandalwood ..	50
2. Black vetiver roots ..	50
3. Nut grass tubers ..	50
4. Small kashmere tree roots ..	50
5. Fruits of roxburgh's tree of beauty ..	50
6. Rhizome of blue water lily ..	50
7. Lotus rhizome ..	50
8. Lodh tree bark ..	50
9. Indian madder ..	50
10. Red sanders ..	50
11. False pareira brava ..	50
12. Chirata ..	50
13. Banyan bark ..	50
14. Peepal tree bark ..	50
15. Camphor zedoary ..	50
16. Mollugo cerviana herb ..	50
17. Liquorice root ..	50
18. Lesser galangal ..	50
19. Wild snake gourd herb ..	50
20. Mountain ebony bark (Purple) ..	50
21. Mango tree bark ..	50
22. Gum of red silk cotton tree ..	50
23. Fire flame flowers ..	800
24. Raisins ..	1000
25. Sugar ..	5000
26. Cane jaggery old ..	2500
27. Water (Litres) ..	25

Preparation :

Dissove sugar and jaggery in the water and crush the raisins in it. Crushed drugs one to 22 and add to

this solution and mix well. Add drug 23 and keep in the vessel to ferment and obtain asava.

Action and uses :

Used in all urinary and urinogenital disorders. Improves digestion and increases appetite. Useful in gonorrhoea and urethritis. It is highly cooling and diuretic in properties.

Dose :

15 to 30 ml. Twice or thrice a day.

14. DASAMOOLARISHTA

(Bhaishajyaratnavali : Vajeeakaranadhikara)

Drugs required :

	gms.
1. The ten roots (each 250 grms)	.. 2500
2. Lead wort root	.. 1200
3. Costus root	.. 1200
4. Lodh tree bark	.. 1000
5. Tinospora roots	.. 1000
6. Emblic myrobalan	.. 1000
7. Climbing nettle	.. 600
8. Black catechu	.. 400
9. Tellichery bark	.. 400
10. Chebulic myrobalan (seeds removed)	.. 400
11. Costus root	.. 100
12. Indian madder	.. 100
13. Himalayan cedar wood	.. 100
14. Embelia fruits	.. 100
15. Liquorice root	.. 100
16. Beetle killer roots	.. 100
17. Wood apple bark	.. 100
18. Belleric myrobalan	.. 100

	gms.
19. Spreading hog weed roots	.. 100
20. Long pepper roots	.. 100
21. Nardus root	.. 100
22. Fruits of roxburgh's tree of beauty	.. 100
23. Indian sarsaparilla	.. 100
24. Nigella seeds	.. 100
25. Turpith roots	.. 100
26. Piper aurantiacum fruits	.. 100
27. Lesser galangal	.. 100
28. Long pepper	.. 100
29. Raw betle nut (areca nut)	.. 100
30. Camphor zedoary	.. 100
31. Turmeric	.. 100
32. Indian dill seeds	.. 100
33. Himalayan cherry wood	.. 100
34. Nagakeshar stamens	.. 100
35. Nut grass tubers	.. 100
36. Tellicherry seeds	.. 100
37. Galls	.. 100
38. The eight drugs each	.. 100
39. Raisins	.. 3000
40. Honey	.. 1600
41. Jaggery old	.. 20000
42. Fire flame flowers	.. 1500
43. Cubebs (star anise according to some)	.. 100
44. Vetiver	.. 100
45. Sandal wood	.. 100
46. Nut meg	.. 100
47. Cloves	.. 100
48. Cinnamon bark	.. 100
49. Cardamoms	.. 100
50. Cinnamon leaves	.. 100
51. Nagakeshar stamens	.. 100
52. Long pepper	.. 100
53. Musk (about)	.. 3

54. Water	(Litres) ..	100
	(Litres) ..	12.5

Preparation :

Take drugs 1 to 38, crush and boil in 100 litres water to get a decoction. Heat and reduce the decoction to 25 litres. Cool and filter. Take No. 39 and boil in 8.5 litres of water reducing it to $\frac{2}{3}$ of its volume. Cool and filter. Mix the two decoctions and dissolve drug 41 in it. Then add coarse powders of 42 to 52 and mix. Finally dissolve the musk in the medium and stir it to evenly distribute the ingredients. Seal in the fermentation vessel and obtain arishta after the prescribed period (to clarify the arishta, some paste of clearing nut is added to the filtered arishta and it is allowed to stand until the turbidities are settled. Then filter again and bottle. Some physicians add the musk when all the fermentation and filtration process are over, just before bottling).

N.B. :—The eight drugs referred to in item 38 are not satisfactorily identified as the drugs vary according to the regions and persons. So some substitute are used. Please make use of the information given in the glossary.

Action and uses :

Restorative. Cardiac tonic. Good digestive and carminative, increases appetite. Nervine tonic. Used in disease of heart and lung, promoting disease resistance in these systems. Used in neurasthenia. Used in fevers with Amritharishta and in Pneumonia with Kastooryadi vati and Gorojanadi vati.

Dose :

8 to 15 ml. Twice or thrice a day.

15. DRAKSHA ARISHTA No. 1
(Gadanigraha : Asavadhikara)

Drugs required :

	gms.
1. Raisins	.. 5000
2. Sugar	.. 5000
3. Honey	.. 5000
4. Fire flame flowers	.. 350
5. Nut meg	.. 25
6. Cloves	.. 25
7. Cubebs (star anise according to some)	.. 25
8. Date fruits	.. 25
9. Sandal wood	.. 25
10. Long pepper	.. 25
11. Three aromatics each	.. 25
12. Water	(Litres) .. 50

Preparation :

Boil No. 1 in water and reduce decoction to $\frac{1}{4}$ of original volume. Cool and filter. Dissolve No. 2 and 3 and add coarse powders of Nos. 4 to 11. Transfer to fermentation vessel and obtain arishta after the prescribed period of 21 days.

Action and uses :

Restorative. Cardiac tonic. Appetiser and digestive. Alterative in convalescence. Also useful in haemorrhoids. Mild laxative.

Dose :

8 to 15 ml. twice or thrice a day.

16. **DRAKSHA ARISHTA No. 2**

(Sarangadhara Samhita : Madhyamakhandā)

Drugs required :

	gms.
1. Raisins	.. 2500
2. Jaggery old	.. 10000
3. Cinnamon bark	.. 50
4. Cardamoms	.. 50
5. Cinnamon leaves	.. 50
6. Nagakeshar stamens	.. 50
7. Fruits of roxburgh's of beauty	.. 50
8. Pepper	.. 50
9. Long pepper	.. 50
10. Embelia fruit	.. 50
11. Water	(Litres) .. 25

(Though not enumerated in the formula, fire flame flowers may be added. However fermentation does occur even without its addition).

Preparation :

Prepared decoction of 1 in the water. Heat and reduce it to $\frac{1}{4}$ and cool and filter. Dissolve No. 2 in the decoction. Add drugs 3 to 10 in coarse powdered form and mix well. Add fire flame flowers if desired. Seal and set aside forth prescribed period of 1 month and obtain arishta.

Action and uses :

Cardiac tonic. Used in the palpitation of heart, with arjunarishta. Used in pthisis and wasting diseases. Given during pregnancy. Acts as mild laxative.

Dose :

10 to 25 ml. Twice or thrice a day.

17. DHATRI ARISHTA

(Bhaishajyaratnavali : Sthreerogadhikara)

Drugs required :

	gms.
1. Juice from 2000 emblic myrobalans	
2. Honey $\frac{1}{8}$ of the volume of juice	
3. Long pepper (coarse powders)	.. 100
4. Sugar	.. 2500

Preparation :

Mix all the above and keep to ferment in the vessel for 15 days open and filter.

Action and uses :

Appetiser, digestive, carminative, haematinic and mildly laxative. Used in anaemia, jaundice, diabetes hiccup and also in intermittant fevers.

Dose :

15 to 30 ml. Twice or thrice a day.

18. JEERAKADYARISHTA

(Bhaishajyaratnavali : Sthreerogadhikara)

Drugs required :

	gms.
1. Cumin seeds	.. 10000
2. Old jaggery	.. 15000
3. Fire flame flowers	.. 800
4. Dry ginger	.. 100
5. Nut meg	.. 50
6. Nut grass tubers	.. 50
7. Four aromatics each	.. 50
8. Ajowan fruits	.. 50
9. Cubebs (star anise according to some)	.. 50
10. Cloves	.. 50
11. Water	(Litres) .. 50

Preparation :

Take No. 1 clean, crush and boil in 50 litres of water to obtain decoction concentrated to $\frac{1}{4}$ of the original volume of water. Dissolve No. 2 in the decoction and add 3 and coarse powders of 4 to 10. Mix well and keep in the vessel to ferment. Obtain arishta after the prescribed period.

Action and uses :

A good ecboic and uterine tonic. Emmenagogue and regularises the flow of menstrual discharge. Astringent and appetiser. Used in post partum condition in females along with Sootikaparana rasa and Vata-vidwamsini rasa. In fever during puerperium with pains all over the body and burning sensation of feet and hands, it is given with benefit.

Dose :

15 to 30 ml. Twice or thrice a day.

19. KANAKASAVA

(Bhaishajyaratnavali : Hiccawasadhikara)

Drugs required :

	gms.
1. Purple dhatura herb	.. 200
2. Adhatoda root bark	.. 200
3. Liquorice	.. 100
4. Long pepper	.. 100
5. Jacquins night shade	.. 100
6. Nagakeshar stamens	.. 100
7. Dry ginger	.. 100
8. Beetle killer roots	.. 100
9. Himalayan silver fir leaves	.. 100
10. Fire flame flowers	.. 800
11. Raisins	.. 1000
12. Sugar	.. 5000
13. Honey	.. 2500
14. Water	(Litres) .. 25

Preparation :

Crush 1 and 2 and put into the water. Dissolve Nos. 12 and 13 in it. Add 10 to 11 to this solution. Mix coarse powders of 3 to 9, in the liquid and set aside for fermentation and obtain asava after 30 days.

Action and uses :

Useful in bronchial asthma and bronchitis. Datura and adhatoda as major constituents act mainly as the respiratory tract (Daturine and vasicine).

Dose :

15 to 30 ml. Two or thrice a day.

20. KHADIRARISHTA

(Bhaishajyaratnavali : Kushtadhikara)

Drugs required :

	gms.
1. Black catechu	.. 2500
2. Himalayan cedar wood	.. 2500
3. Psoralea seeds	.. 600
4. False calumba stems (ceylon calumba)	.. 1000
5. Three myrobalans each	.. 1000
6. Honey	.. 10000
7. Sugar	.. 5000
8. Fire flame flowers	.. 1000
9. Cubebs (star anise according to some)	.. 50
10. Four aromatics each	.. 50
11. Nut meg	.. 50
12. Cinnamon leaves	.. 50
13. Long pepper	.. 200
14. Water	(Litres) .. 100

Preparation :

Take Nos. 1 to 5 crush, boil, reduce to $\frac{1}{4}$ and obtain filtered decoction. Dissolve in it 6 and 7 and add powders of Nos. 8 to 13. Transfer to the fermentation vessel and keep for a month to obtain arishta.

Action and uses :

Haematinic and blood purifier. Used in all types of leprosy and allied dermal diseases. Useful in infections of the respiratory system and in cough and splenic enlargement.

Dose :

15 to ml. Twice or thrice a day.

21. KIRATA ARISHTA (I.M.P.C.P.)

Drugs required :

	gms.
1. Chirata ..	5000
2. Cane jaggery old ..	5000
3. Honey ..	2500
4. Five spices each ..	150
5. Chirata ..	150
6. Water (Litres) ..	50

Preparation :

Take No. 1 crush and boil in water reducing decoction to $\frac{1}{4}$ of original volume of water. Cool, filter and dissolve 2 and 3. Add coarse powders of 4 and 5. Keep to ferment and obtain arishta after a month.

Action and uses :

Antiperiodic, digestive, anthelmintic and blood purifier. Useful in intermittent fever, malaria and skin diseases.

Dose :

8 to 15 ml. Twice or thrice a day.

22. KUTAJA ARISHTA (Bhaishajyaratnavali : Ateesaradhikara)

Drugs required :

	gms.
1. Tellichery bark ..	5000
2. Raisins ..	2500
3. Mahua flowers ..	500
4. Small kashmere tree roots ..	500
5. Fire flame flowers ..	1000
6. Cane jaggery old ..	5000
7. Water (Litres) ..	50

Preparation :

Take No. to 4, crush and boil in the water. Reduce decoction to $\frac{1}{4}$ volume, cool and filter. Dissolve No. 6 in the decoction and mix No. 5 with it. Keep to ferment and take arishta after a month.

Action and uses :

Astringent, digestive, antidyenteric, and anti-periodic. Used in diarrhoea and haemorrhoids. Used along with Lohasava when blood and mucus are present in stools. Used with Babbularishta in motions with blood and used with Draksharishta and Abhyarishta in haemorrhoids. Tellicherry bark is active in controlling dysentery and purging (Kurchine group of alkaloids).

Dose :

15 to 30 ml. Twice or thrice a day.

23. KUMARIYASAVA

(Sarangadhara Samhita : Madyamakhandā)

Drugs required :

1. Aloe juice—fresh	(Litres) ..	12.5
		gms.
2. Jaggery old	..	5000
3. Honey	..	2500
4. Calx of Iron or iron filings	..	2500
5. Three pungents each	..	25
6. Cloves	..	25
7. Four aromatics each	..	25
8. Lead wort root	..	25
9. Long pepper root	..	25
10. Embelia fruit	..	25
11. Large long pepper	..	25
12. Cubebs	..	25

	gms.
13. Indian globe flower ..	25
14. Coriander ..	25
15. Raw beetle nut (areca nut) ..	25
16. Picrorrhiza ..	25
17. Nut grass tubers ..	25
18. Three myrobalans each ..	25
19. Lesser galangal ..	25
20. Himalayan cedar wood ..	25
21. Turmeric ..	25
22. False calumba stem (ceylon calumba) ..	25
23. Bow-string hemp rhizome ..	25
24. Raisin ..	25
25. Croton seeds ..	25
26. Costus roots ..	25
27. Bala roots (sida roots) ..	25
28. Roots of fragrant sticky mallow ..	25
29. Climbing nettle roots ..	25
30. Small caltrops ..	25
31. Rue ..	25
32. Pellitory ..	25
33. Lodh tree bark ..	25
34. Fire flame flowers ..	400

Preparation :

Mix all the drugs (except 1, 2, 3 and 4) in coarse powdered form with 2, 1, 3 and 4. Mix well and seal in the pot. Filter and take arishta after 1 month.

Action and uses :

Haematinic and diuretic. Appetiser. Useful in gastric and duodenal ulcers, flatulance, and urinary disorders like calculi. In dysmenorrhoea it is recommended for use for 3 months.

Dose :

8 to 15 ml. Twice or thrice a day.

24. LOHASAVA

(Sarangadhara Samhita : Madhyamakhandā)

Drugs required :

	gms.
1. Calx of iron ..	200
2. Three pungents each ..	200
3. Three myrobalans each ..	200
4. Ajowan fruits ..	200
5. Embelia fruits ..	200
6. Nut grass tubers ..	200
7. Lead wort root ..	200
8. Fire flame flowers ..	1000
9. Honey ..	3200
10. Jaggery ..	5000
11. Water (Litres) ..	25

Preparation :

Powder 1 to 8 add 9 and 10 and dissolve in water. Transfer to the fermentation vessel seal and keep for 1 month. Open and filter arishta after a month.

Action and uses :

Haematinic, appetiser, astringent and restorative. Useful in anaemia and jaundice when given with Punarnavasava.

It is given with Gokshuradhi choorna in oedema.

In diarrhoea and dysentery it is given with Karpeerarishta and Babboolarishta.

In bronchitis and asthma it is given with Vasarishta and Kanakasava.

Dose :

10 to 20 ml. Twice or thrice a day.

25. MUSTARISHTA

(Bhaishajyaratnavali : Agnimandyadhikara)

Drugs required :

	gms.
1. Nut grass tubers	.. 10000
2. Jaggery old	.. 15000
3. Fire flame flowers	.. 800
4. Ajowan fruits	.. 100
5. Dry ginger	.. 100
6. Black pepper	.. 100
7. Cloves	.. 100
8. Fenugreek seeds	.. 100
9. Lead wort root	.. 100
10. Cumin seeds	.. 100
11. Water	(Litres) .. 50

Preparation :

Crush and boil No. 1 in the water. Reducing the decoction to $\frac{1}{4}$. Cool and filter. Add to the decoction 2 and 3 and coarse powders of 4 to 10, mix well. Transfer to an earthen pot, seal and take arishta after a month.

Action and uses :

Digestive ; carminative, appetiser and astringent. Useful in diarrhoea, dysentery and cholera.

Dose :

15 to 30 ml. Twice or thrice a day.

26. PANCHATHIKTARISHTA (I.M.P.C.P.)

Drugs required :

	gms.
1. Chirata	600
2. Picrorrhiza	600
3. Tinospora stem and root	600
4. Mollugo cerviana	600
5. Nut grass tubers	600
6. Jaggery	5000
7. Fire flame flowers	800
8. Water	(Litres) .. 50

Preparation :

Crush 1 to 5 and boil in the water reducing the decoction to $\frac{1}{4}$. Cool and filter. Add Nos. 6 and 7 and seal in the pot. Take arishta after a month.

Action and uses :

Antiperiodic and blood purifier. Useful in malarial and other intermittent fevers. Used in skin diseases of chronic type. (The first five drugs are bitter anthelmintics and also control fever. Mollugo cerviana is a good antiperiodic—Jwarahara).

Dose :

8 to 15 ml. Twice or thrice a day.

27. PIPPALYASAVA

(Sarangadhara Samhita : Madhyamakanda)

Drugs required :

	gms.
1. Long pepper	25
2. Black pepper	25

		gms.
3.	Cubebs	25
4.	Turmeric	25
5.	Lead wort root	25
6.	Nut grass tubers	25
7.	Embelia fruits	25
8.	Areca nut—raw	25
9.	Lodh tree bark	25
10.	Emblic myrobalan	25
11.	Flase praira brava	25
12.	Elavalukkam (Malabar drug); some use aloes	25
13.	Vetiver	25
14.	Sandalwood	25
15.	Costus root	25
16.	Cloves	25
17.	Indian valerian	25
18.	Nardus root	25
19.	Cinnamon bark	25
20.	Flowers of Roxburgh's tree of beauty	25
21.	Nagakeshar stamens	25
22.	Cardamoms	25
23.	Cinnamon leaves	25
24.	Jaggery	15000
25.	Fire flame flowers	500
26.	Raisins	3000
27.	Water	(Litres) 25

Preparation :

Crush 1 to 23 into coarse powders and add to the water. Dissolve 24 in it and add crushed raisins. Put 25, mix well and keep to ferment for a month. Filter and take asava.

Action and uses :

Digestive, carminative and appetiser. Used in loss of appetite, anaemic, dysentery piles.

Dose :

8 to 15 ml. Twice or thrice a day.

28. PUNARNAVASAVA

(Bhaishajyaratnavali : Sophadhikara)

Drugs required :

	gms.
1. Three pungents each ..	50
2. Three myrobalans each ..	50
3. Flase calumba stem (ceylon calumba) ..	50
4. Small caltrops ..	50
5. Indian night shade roots ..	50
6. Jacquins night shade ..	50
7. Adhatoda leaves ..	50
8. Castor roots ..	50
9. Picrorrhiza ..	50
10. Large long pepper ..	50
11. Spreading hog weed roots ..	50
12. Margosa bark ..	50
13. Tinospora stem and root ..	50
14. Dry radish roots ..	50
15. Climbing nettle roots ..	50
16. Wild snake gourd plant ..	50
17. Fire flame flowers ..	800
18. Raisins ..	1000
19. Sugar ..	5000
20. Honey ..	2500
21. Water (Litres) ..	25

Preparation :

Convert 1 to 17 into coarse powders and add to water. Put 18 to 20, transfer to the vessel and seal. Filter and take asava after a month.

Action and uses :

Diuretic, haematinic, choalagogue. Useful in oedema, ascitis, spleen and liver enlargement, anaemia and jaundice. It is usually given with Punarnava mandoorā in oedema, anaemia and jaundice. Gokṣhuradi churna may also be given with this asava.

Dose :

15 to 30 ml. Twice or thrice a day.

29. ROHEETAKARISHTA

(Bhaishajyaratnavali : Pleehayakridadhikara)

Drugs required :

	gms.
1. Amoorā bark	.. 5000
2. Old jaggery	.. 10000
3. Fire flame flowers	.. 800
4. Five spices each	.. 50
5. Three aromatics each	.. 50
6. Three myrobalans each without seed	.. 50
7. Water	(Litres) .. 50

Preparation :

Prepare Amoorā decoction in 50 litres of water, reducing it to $\frac{1}{4}$. Cool the decoction and add jaggery and dissolve. Add coarse powders of 4 to 6 and transfer to the vessel. Put fire flame flowers seal, and take asava after a month.

Action and uses :

Used in liver and spleen enlargement. Useful also in piles dysentery and jaundice. In liver and spleen enlargement, it is given with chitrakadhi vati and Jasada bhasma, for two months, twice daily according to the age and condition of the patient and the severity of the disease.

Dose :

15 to 30 ml. Twice or thrice a day.

30. SARIBADYASAVA

(Bhaishajyaratnavali : Pramehadhikara)

Drugs required :

	gms.
1. Indian sarsaparilla	200
2. Black sarsaparilla	200
3. Nut grass tubers	200
4. Lodh tree bark	200
5. Banyan tree bark	200
6. Peepal tree bark	200
7. Round zedoary	200
8. Himalayan cherry wood	200
9. Black vetiver	200
10. False pareira brava	200
11. Emblic myrobalan	200
12. Tinospora root and stem	200
13. Vetiver	200
14. Sandalwood	200
15. Red sanders	200
16. Ajowan fruits	200
17. Picrorrhiza	200

	gms
18. Cinnamon leaves ..	200
19. Cardamoms ..	200
20. Larger cardamoms ..	200
21. Costus roots ..	200
22. Senna leaves ..	200
23. Chebulic myrobalan (without seeds) ..	200
24. Old jaggery ..	15000
25. Fire flame flowers ..	500
26. Raisins ..	2000
27. Water (Litres) ..	25

Preparation :

Dissolve 24 in water. Add 25 and 26 and powders of 1 to 23. Mix well, seal and take asava after a month.

Action and uses :

Blood purifier. Useful in skin diseases, rheumatic conditions and syphilitic condition. In syphilitic conditions, it is given with Devakusuma Rasayana or 'Shatguna sindoorā'.

Dose :

15 to 30 ml. Twice or thrice a day.

31. SARASWATARISHTA

(Bhaishajyaratnavali : Rasayanadhikara)

Drugs required :

	gms.
1. Indian penny wort ..	1000
2. Asparagus roots ..	250
3. French honey suckle tubers ..	250

	gms.
4. Chebulic myrobalan (without seeds) ..	250
5. Vetiver ..	250
6. Ginger-dry ..	250
7. Dill seeds ..	250
8. Honey ..	500
9. Sugar ..	1250
10. Fire flame flowers ..	250
11. Piper aurantiacus ..	13
12. Turpith roots ..	13
13. Cloves ..	13
14. Long pepper ..	13
15. Sweet flag ..	13
16. Costus roots ..	13
17. Withania root ..	13
18. Belleric myrobalan ..	13
19. Tinospora stem and root ..	13
20. Cardamoms ..	13
21. Cinnamon bark ..	13
22. Embelia fruits ..	13
23. Water (Litres) ..	12.5

Preparation :

Crush 1 to 7 and boil in the water and reduce the decoction to 4 and add 8, 9 and 10 and coarse powders of 11 to 22 to the cold filtered decoction. Seal in the vessel and take arishta after a month.

N.B. Some gold leaves are placed inside the vessel during fermentation because the original prescription reads that this arishta should be prepared in a golden pot. However gold remains unaffected and could be recovered.

Action and uses :

Appetiser and rejuvinator. Strengthens the brain

and nervous system. Improves memory if used regularly.

Dose :

10 to 20 ml. Twice or thrice a day.

32. USEERASAVA

(Bhaishajayaratnavali : Raktapittadhikara)

Drugs required :

	gms.
1. Vetiver ..	50
2. Black vetiver ..	50
3. Lotus rhizome ..	50
4. Cashmari tree bark ..	50
5. Water lily rhizome ..	50
6. Fruits of roxburgh's tree of beauty ..	50
7. Wood of himalayan cherry ..	50
8. Lodh tree bark ..	50
9. Indian madder ..	50
10. Climbing nettle roots ..	50
11. False pareira brava ..	50
12. Chirata ..	50
13. Banyan tree roots ..	50
14. Bark of common fig tree ..	5
15. Round zedoary ..	50
16. Mollugo cerviana ..	50
17. White lotus flowers ..	50
18. Wild snake gourd herb ..	50
19. Mountain ebony bark yellow ..	50
20. Rose apple tree bark ..	50
21. Gum of red silk cotton tree ..	50
22. Raisins ..	1000

		gms.
23. Fire flame flowers	..	800
24. Sugar	..	5000
25. Honey	..	2500
26. Water	(Litres) ..	25

Preparation :

Fumigate the fermentation vessel with some nardus root and black pepper. After anointing the interior with ghee. Pour the water and add 22 to 25 and crush and stir to dissolve. Add coarse powders of 1 to 21, seal and filter asava after a month.

Action and uses :

Haemostatic, restorative. Used in haemorrhages and bleeding from the respiratory and alimentary tracts. Given in piles to check bleeding.

Dose :

15 to 30 ml. Twice or thrice a day.

33. VASARISHTA

(Gadanigraha : Asavadhikara)

Drugs required :

		gms.
1. Adhatoda leaves (roots preferred) fresh	..	10000
2. Jaggery	..	5000
3. Fire flame flowers	..	400
4. Four aromatics each	..	50
5. Cubebs (star anise according to some)	..	50
6. Three pungents each	..	50
7. Black vetiver	..	50
8. Water	(Litres) ..	25

Preparation :

Prepare a decoction of Adhatoda leaves in the given quantity of water by reducing it to $\frac{1}{4}$. Add coarse powders of 4 to 7 and 2 and 3 to the cooled decoction and stir well, and dissolve the jaggery. Seal the pot and take the arishta after 15 days.

Action and uses :

Haemostatic and anti-inflammatory. Useful in coughs, bronchitis, asthma and pthisis. In bronchitis it is given with Pravala bhasma and Swasananda gutika. In haemoptysis and pthisis it given with Laksha chchorna, and Swarnamalinee vasantha rasa. Adhatoda has specific action in diseases of the respiratory system, especially in bronchitis and asthma.

Dose :

10 to 25 ml. Twice or thrice a day.

SECTION III

CHOORNA

Concept and Terminology :

Choorna are fine dry powders of drugs. The term choorna may be applied to the powder of a single drug or a mixture of two or more drugs which are powdered separately prior to their being mixed to homogeneity.

Preparation :

Equipment required :

1. The drugs ennumerated in the recipe in clean and well dried state.
2. A mortar and pestle.
3. A fine sieve or fine cloth of close mesh.

(In large scale manufacture in factories, disintegrators, pulverisors, and ball mills are employed for powdering. The sieving is done by mechanical sifters which handle large quantities of material in a short time.)

Process of Preparation :

The drugs which are to be used in the preparation should be taken from recently collected material. Drugs which are aged by prolonged storage or changed in colour, taste or scent and those which are insect infested should be positively rejected. However, drugs like Embelia fruits, long pepper, coriander seeds, honey, jaggery and even cow's ghee are preferred from old stock, which should be unspoil otherwise.

In general, the aromatic drugs are slightly fried in order to increase or sweeten their aroma. Any extraneous material should be removed from the drugs.

The choorna should be very fine so as to be called amorphous and should be perfectly dry. The fineness of the sieve used should be preferably 80 mesh per square inch or still finer.

Storage :

The prepared choorna should be stored in tightly stoppered glass bottles. Polythene and foil packing also gives damp proof protection.

It is said that the choorna retain their potency for two months and then gradually deteriorate. In any case, unless otherwise spoilt by moisture or insects or fungi, the choorna keep active for an year.

In these days, for easy handling in a convenient form the choorna are pressed into tablets of uniform weight and packed in bottles or tubes made of glass or plastic. In industry, the tablets are made, counted and packed by electronic devices.

34. ARKALAVANAM

(Bhaishajyaratnavali : Pleehadikara)

Drugs required :

	part
1. Calotropis leaves (dry)	.. 1
2. Rock salt powder	.. 1



Comminuting drugs in mortar



Sifting after comminution

Preparation :

Place the two drugs in an earthen vessel and seal. Heat it on an oven for 10 hours till the contents of the pot are converted into ashes. Then allow the pot to cool and collect the contents. Store it after finely powdering it.

Action and uses :

Digestive, carminative. Useful in the enlargement of liver and spleen; indicated also in gastric and intestinal disorders with curd supernatant (whey).

Dose :

$\frac{1}{2}$ to 1 grams; twice a day.

N.B.: Though this is an ash it is included in the Choorna section in the system.

35. ASHTA CHOORNA

(Ashtangahridaya : Gulma Chikitsa)

Drugs required :

	part
1. Dry ginger ..	1
2. Long pepper ..	1
3. Black pepper ..	1
4. Ajowan seeds ..	1
5. Rock salt ..	1
6. Cumin seeds ..	1
7. Nigella seeds ..	1
8. Asafoetida ..	1

Preparation :

Fry separately 1, 2, 6 and 8. Powder separately 1 to 8 sieve and mix

Action and uses :

Digestive, carminative, astringent and antacid. Used with hot water or butter milk. In gastric and peptic ulcer or as an antacid it is given with ghee. Useful in indigestion and diarrhoea.

Dose :

1 to 2 gm.

36. ASWAGANDHA CHOORNA

(I.M.P.C.P.)

Drugs required :

1. Withania roots (some quantity)

Preparation :

Powder the drug sieve and store.

Action and uses :

Restorative, tonic aphrodisiac and nervine and cardiac tonic.

1. Used in pthisis with :

		mg.
1. Three pungents powder	..	600
2. Tinospora starch	..	300
3. Sugar candy	(gms.) ..	1½

2. In wasting diseases and emaciation with :

		mg.
1. Bamboo manna	..	200
2. Tinospora starch	..	200
3. Long pepper powder	..	125
4. Cloves powder	..	200
5. Makaradwaja or Shadhguna sin- doora		30 to 60

3. During pregnancy : Mixed in goat's milk with some sugarcandy given with :

	mg.
1. Asparagus roots powder ..	125
2. Powder of French honey suckle tubers ..	125
3. Liquorice powder ..	125
mixed in warm milk with some sugarcandy	

4. In insomnia and fractures the powder is used with hot milk.

Dose :

1 to 3 grms. Twice or thrice a day given along with sugar, palm sugar or warm milk.

37. AVIPATHIKARA CHOORNA

(Bhaishajyaratnavali : Amlapitthadhikara)

Drugs required :

	part
1. Three pungents each ..	1
2. Three myrobalans each without seed ..	1
3. Nut grass tubers ..	1
4. Vi ⁺ salt (Black salt) ..	1
5. Embelia fruit ..	1
6. Cardamoms ..	1
7. Cinnamon leaves ..	1
8. Cloves ..	11
9. Turpith root ..	44
10. Sugar ..	66

Preparation :

Powder separately and mix after sieving.

Action and uses :

Laxative, digestive and carminative. Appetiser.
Useful in dyspepsia, constipation and also in piles.

Dose :

1 to 2 gms. with hot water.

38. BHASKARA LAVANA CHOORNA

(Sarangaadhara Samhitha : Madhyamakanda)

Drugs required :

	parts
1. Common salt	8
2. Sowarcha lavana	5
3. Vit salt (black salt)	2
4. Rock salt	2
5. Coriander fruits	2
6. Long pepper	2
7. Long pepper roots	2
8. Nigella seeds	2
9. Cinnamon leaves	2
10. Nagakeshar stamens	2
11. Himalayan silver fir leaves	2
12. Malabar tamarind	2
13. Black pepper	1
14. Cumin seeds	1
15. Dry ginger	1
16. Pomogranate fruit rind	4
17. Cinnamon bark	$\frac{1}{2}$
18. Cardamoms	$\frac{1}{2}$

Preparation :

Dry the drugs separately and powder separately. Sieve and mix.

Action and uses :

Digestive, carminative, appetiser and astringent. Useful in enlargement of liver and spleen. Used in the treatment of piles and also other disorders of the alimentary tract. Given two times a day in indigestion. In diarrhoea it is given with butter milk. In difficult and painful menstruation, it is given with some rock salt and an infusion of the jute plant.

Dose :

1 to 2 gms. Twice or thrice a day with butter milk or hot water.

39. DANTA DHAVANA CHOORNA
(I.M.P.C.P.)

Drugs required :

	part
1. Three myrobalans (without seeds) ..	1
2. Oak galls ..	1
3. Nut meg ..	1
4. Three pungents ..	1
5. Cardamoms ..	1
6. Cloves ..	1
7. Cinnamon bark ..	1
8. Camphor pure ..	1
9. Paddy husk—burnt to white ashes ..	1

Preparation :

Make fine powders separately and mix after sieving.

Action and uses :

Used as tooth powder. Useful in pyorrhoea, gingivitis and diseases of the teeth and gums.

40. DADIMASHTAKA CHOORNA
(Ashtanga Hridaya : Atisara chikitsa)

Drugs required :

	parts
1. Bamboo manna	1
2. Four aromatics each	2
3. Ajowan fruits	4
4. Coriander seeds	4
5. Cumin seeds	4
6. Long pepper roots	4
7. Three pungents each	4
8. Pomogranate rind	32
9. Sugar	32

Preparation : .

Make very fine powders separately, sieve and mix

Action and uses :

Astringent, digestive and carminative. Useful in checking diarrhoea and dysentery. Used with butter milk.

Dose :

1 to 2 gms. Twice or thrice a day with honey or butter milk.

41. DRAKSHADI CHOORNA
(Vaidya chintamani : Kshaya ptakarana)

Drugs required :

	part
1. Raisins ..	1
2. Parched paddy ..	1
3. Rhizome of white water lily ..	1
4. Liquorice ..	1
5. Date fruit (flesh) ..	1
6. Sarsaparilla—Indian ..	1
7. Bamboo manna ..	1
8. Black vetiver ..	1
9. Emblic myrobalan ..	1
10. Nut grass tubers ..	1
11. Sandalwood ..	1
12. Vetiver ..	1
13. Four aromatics each ..	1
14. Long pepper ..	1
15. Embelia fruits ..	1
16. Small caltrops ..	1
17. Coriander fruits ..	1
18. Dry ginger ..	1
19. Round zedoary ..	1
20. Camphor pure ..	1
21. Himalayan silver fir leaves ..	1
22. Sugar ..	24

Preparation :

Make fine powders of the drugs sieve and mix.

Action and uses :

Restorative, alterative and appetiser. Used in coughs, wasting diseases and pthisis. Useful also in leucorrhoea and menorrhagia.

Given in coughs and pthisis with ghee. In menorrhagia it is given with a paste of emblic myrobalans and asparagus roots along with a decoction of vetiver.

In menorrhoea it is given with a powder of tender palm leaves.

Dose :

1 to 2 gms. Twice or thrice a day.

42. ELADI CHOORNA

(Gadanigraha : Choornadhikara)

	parts
1. Cardamoms ..	1
2. Cinnamon bark ..	2
3. Cinnamon leaves ..	3
4. Nagakeshar stamens ..	4
5. Black pepper ..	5
6. Long pepper ..	6
7. Dry ginger ..	7
8. Sugar ..	28

Preparation :

Make fine powders, sieve and mix.

Action and uses :

Digestive, carminative and antiinflammatory. Useful in loss of appetite, indigestion, dyspepsia, coughs, bronchitis, and inflammation of the throat and chest, cardiac stimulant.

Used in coughs and bronchitis with Vasarishta.

Used in heart diseases with Arjunarishta.

Dose :

½ to 1 gram. Twice or thrice a day.

43. GANGADHARA CHOORNA (Sarangadhara Samhita : Madhyamakanda)

Drugs required :

	part
1. Nut grass tubers ..	1
2. Tellicherry seeds ..	1
3. Baal fruit dry (pulp) ..	1
4. Lodhi tree bark ..	1
5. Gum of red silk cotton tree ..	1
6. Fire flame flowers ..	1

Preparation :

Powder the drugs separately, sieve and mix.

Action and uses :

Astringent, digestive and appetiser. Used in diarrhoea, dysentery etc. : with butter milk.

Dose :

1 to 2 gms. Twice or thrice a day.

44. GOKSHURADI CHOORNA (I.M.P.C.P.)

Drugs required :

	part
1. Small caltrops ..	1
2. Borax (Black) ..	1
3. Borax (white) ..	1
4. Salt petre ..	1
5. Roots of spreading hog weed ..	1
6. Chebulic myrobalan ..	1
7. Impure carbonate of potash ..	1
8. Impure carbonate of soda ..	1
9. Cubebs ..	1
10. Rhubarb ..	1

Preparation :

Make fine powders of the drugs separately, sieve and mix.

Action and uses :

Diuretic ; laxative. Useful in oedema, ascitis and water retention in the body and the enlargement of liver and spleen. Useful in jaundice. Useful also in urithritis.

Dose :

1 to 2 grams : two or three times a day.

45. JATHEEPHALADHI CHOORNA

(Sarangadhara Samhitha : Madhyamakanda)

	part
Drugs required :	
1. Nut meg	1
2. Cloves	1
3. Cardamoms	1
4. Cinnamon leaves	1
5. Cinnamon bark	1
6. Nagkeshar stamens	1
7. Camphor pure	1
8. Sandal wood	1
9. Sesame seeds	1
10. Bamboo manna	1
11. Indian valerian	1
12. Emblic myrobalan	1
13. Himalayan silver fir leaves	1
14. Long pepper	1
15. Chebulic myrobalan (without seeds)	1
16. Fennel seeds	1
17. Lead wort root	1

	part
18. Dry ginger	.. 1
19. Embelia fruits	.. 1
20. Black pepper	.. 1
21. Sugar	.. 35
22. Indian hemp	.. 15

The Indian hemp leaves are not included in the preparation though the original formula states that it should be included. This is due to Excise restrictions and Prohibition of narcotic and intoxicating drugs. Some physicians interpret the Sanskrit formula in a different manner and use Sun hemp seeds for 'bhanga'.

Preparation :

Finely powder the drugs and sieve the powders. Mix the fine powders.

Action and uses :

Astringent and carminative. Useful in diarrhoea and dysentery. Given with honey in coughs, common colds and bronchitis.

Useful also in anorexia.

In Indian hemp is included according to the formula, the medicine has sedative properties and is much valued in diseases of the respiratory system.

Dose :

1 to 2 gm. Twice or thrice daily.

46. KARPOORADI CHOORNA (Sahasra Yoga : Choorna Prakarna)

Drugs required :

	part
1. Camphor pure ..	1
2. Round zedoary ..	1
3. Star anise fruit ..	1
4. Nut meg ..	1
5. Mace ..	1
6. Cloves ..	2
7. Nagakeshar stamens ..	3
8. Black pepper ..	4
9. Long pepper ..	5
10. Dry ginger ..	6
11. Sugar ..	25

Preparation :

Powder the drugs separately, sieve and mix.

Action and uses :

Expectorent and sedative. Useful in coughs, bronchitis, asthma, hiccup and common cold. Usually given with honey.

Dose :

1 to 2 gms. Twice or thrice daily.

47. LAKSHA CHOORNA (I.M.P.C.P.)

Drugs required :

1. Lac sticks (some quantity).

(Lac of other types such as sealing lac should not be used for this purpose).

Preparation :

Make a fine powder sieve and store.

Action and uses :

Haemostatic. Used along with honey, butter or sugar. Useful in haemorrhage, haemoptysis etc. Also useful in dysentery and epistaxis. Used along with Salmali churna, Guduchi satwa etc. In epistaxis it is mixed in some cow's milk and instilled into the nostrils.

Dose :

1 to 2 gms. Twice or thrice a day.

48. MADHUSNUHI CHOORNA (I.M.P.C.P.)

Drugs required :

1. China root (some quantity).

Preparation :

Finely powder sieve and store.

Action and uses :

Blood purifier. Useful in skin diseases. Given with a decoction prepared by boiling 12 gms. each of Tinospora stems, black pepper, nut grass tubers, ajowan and china root in 16 ounces of water and reduced to $\frac{1}{4}$. This combination is useful in fevers with pain and swelling in the joints.

Dose :

$\frac{1}{2}$ to 1 gm. Twice or thrice a day.

49. MAHASUDARSANA CHOORNA (I.M.P.C.P.)

Drugs required :

	part
1. Sudarsana choorna (prepared medicine) ..	1
2. Cinchona bark powder ..	½

Preparation :

Mix the two in fine powder form.

Action and uses :

Much powderful than sudarsana churna. Anti-periodic, blood purifier. Useful in intermittent fevers like malaria etc. Employed in the treatment of skin diseases also.

Dose :

1 to 2 gms. with Panchathiktha decoction. Twice or thrice a day.

50. PUSHYANUGA CHOORNA (Bhaishajya ratnavali : Sthree rogadhikara)

Drugs required :

	part
1. False pareira brava ..	1
2. Rose apple seeds ..	1
3. Mango seed kernal ..	1
4. Roots of Aerva lanata ..	1
5. Berberis extract (or false calumba extract) ..	1
6. Oak galls ..	1
7. Gum of red silk cotton tree ..	1

	part
8. Indian madder	1
9. Lotus stamens	1
10. Saffron (some use asofoedita)	2
11. Atis roots	2
12. Nut grass tubers	1
13. Bael fruit	1
14. Lodh tree bark	1
15. Red ochre	1
16. Cashmere tree bark	2
17. Black pepper	1
18. Dry ginger	1
19. Raisins	1
20. Red sanders	2
21. Indian trumpet flower—bark	1
22. Tellicherry seeds	1
23. Indian sarsaparilla	1
24. Fire flame flowers	1
25. Liquorice	1
26. Arjuna myrobalan	1

Preparation :

Dry and powder the drugs separately. Sieve and mix.

Action and uses :

Uterine tonic. Regularises menstrual flow. Used in leucorrhoea, metrorrhagia, dysmenorrhoea, and other uterine disorders. Given with Asokarishta, Lodhrāsava or sugar.

Dose :

1 to 2 gms. Twice or thrice daily.

51. RASNADI CHOORNA (I.M.P.C.P.)

Drugs required :

	part
1. Lesser galangal ..	1
2. Himalayan cedar wood ..	1
3. Costus root ..	1
4. Sal tree resin ..	1
5. Red ochre ..	1
6. Liquorice ..	1
7. Nut grass tubers ..	1
8. Black pepper ..	1
9. Cuttle fish bone ..	1
10. Sandalwood ..	1
11. Withania root ..	1
12. Picrorrhiza ..	1
13. Aloes ..	1
14. Sweet flag ..	1
15. Turmeric ..	1
16. Bala roots (sida roots) ..	1
17. Ginger-Dry ..	1
18. Long pepper ..	1
19. Vetiver ..	1
20. Black vetiver ..	1
21. Tamarind leaf rachis ..	1
22. Eagle wood ..	1
23. Bonduc nuts (bark of Indian beech tree is used) ..	1
24. Sahasravedi (Malabar drug—a stone) ..	1

Preparation :

Powder all the drugs except dry ginger and long pepper. These two drugs are fried and then powdered. Sieve the powders and mix.

Action and uses :

Antiinflammatory and anticatarrheal. Used in migraine and headache. Used in fevers accompanied with cold and catarrheal symptoms. Intended only for external application. Mixed with castor oil and applied in headache.

52. SALMALI CHOORNA
(I.M.P.C.P.)

Drugs required :

1. Gum of red silk cotton tree (some quantity).

Preparation :

Dry, powder, sieve and store.

Action and uses :

Haemostatic and astringent. Used along with Laksha churna in haematemesis, haemoptysis and other haemorrhagic conditions and in monorrhagia and metrorrhagia. Useful also in dysentery.

Dose :

1 to 2 gms. with honey, butter or ghee according to the diseases.

53. SITOPHALADI CHOORNA

(Yogarathnakara : Rajayakshma Prakarana)

Drugs required :

	parts
1. Sugarcandy	.. 16
2. Bamboo manna	.. 8

	parts
3. Long pepper ..	4
4. Cardamoms ..	2
5. Cinnamon bark ..	1

Preparation :

Powder separately. sieve, mix and store.

Action and uses :

Antiinflammatory, digestive and carminative. A good sedative, expectorant. Anti infective. Used in coughs and bronchitis with ghee or honey.

Dose :

1 to 2 gms. Twice or thrice a day.

54. SUDARSANA CHOORNA

(Sarangadhara Samhita : Madhyamakanda)

Drugs required :

	part
1. Three myrobalans each (without seeds) ..	1
2. Turmeric ..	1
3. False calumba stem ..	1
4. Indian night shade ..	1
5. Jacquins night shade ..	1
6. Round zedoary ..	1
7. Three myrobalans ..	1
8. Long pepper root ..	1
9. Bow string hemp rhizome ..	1
10. Tinospora ..	1
11. Climbing nettle roots ..	1
12. Picrorhiza ..	1
13. Mollugo cerviana ..	1
14. Nut gras tubers ..	1

		part
15.	Physic nut	1
16.	Black vetiver	1
17.	Margosa bark	1
18.	Costus root	1
19.	Liquorice	1
20.	Tellicherry bark	1
21.	Tellicherry seeds	1
22.	Ajowan seeds	1
23.	Beetle killer roots	1
24.	Drum stick seeds	1
25.	Common alun	1
26.	Sweet flag	1
27.	Himalayan cherry wood	1
28.	Vetiver	1
29.	Sandal wood	1
30.	Indian atees	1
31.	Bala roots (sida roots)	1
32.	Sweet smelling hare foot	1
33.	Unifoliate tick trefoil	1
34.	Embelia fruit	1
35.	Indian valerian	1
36.	Lead wort root	1
37.	Himalayan cedar wood	1
38.	Cubebs	1
39.	Wild snake gourd herb	1
40.	Cloves	1
41.	Bamboo manna	1
42.	Rhizomes of white lotus	1
43.	Cinnamon leaves	1
44.	Mace	1
45.	Himalayan silver fir leaves	1
46.	Jeevaka (Malabar drug)	1
47.	Kakoli (Malabar drug)	1
48.	Falcate trumpet flower fruits	1
49.	Cinnamon bark	1

N.B. : For Jeevaka and Kakoli french honey suckle tubers and asparagus racemosus roots are substituted respectively. For falcate trumpet flower fruits substitute Tinospora if the former is not available.

Preparation :

Dry the drugs, powder, sieve and store.

Action and uses :

Antiperiodic, blood purifier and digestive. Useful in intermittent fevers and malarial fevers. Useful also in skin diseases.

Dose :

1 to 3 gms. Twice or thrice daily.

55. TANKANA CHOORNA

(Otherwise known as Tankana Bhasma)
(I.M.P.C.P.)

Drug required :

1. Borax—White or black.

Preparation :

Heat the borax until the mass is totally dehydrated. Make very fine powders of treated borax, sieve and store.

Action and uses :

Antiinflammatory, used as a dusting powder over ulcers. Internally it is used with honey in coughs and bronchitis.

Dose :

About 100 mg. when given internally. Two or three doses a day.

56. TALEESADI CHOORNA

(Sarangadhara samhita : Madhyamaknanda)

Drugs required :

	parts
1. Himalayan silver fir leaves	1
2. Black pepper	2
3. Dry ginger	3
4. Long pepper	4
5. Bamboo manna	5
6. Cardamoms	$\frac{1}{2}$
7. Cinnamon bark	$\frac{1}{2}$
8. Sugarcandy	32

Preparation :

Make the above drugs into fine powder separately, sieve, mix and store.

Action and uses :

Digestive, carminative and expectorant. Useful in coughs bronchitis and dyspepsia with honey. Useful also in mild fevers.

Dose :

1 to 2 gms. Twice or thrice a day.

57. THRIPHALA CHOORNA
(I.M.P.C.P.)

Drugs required :

ALL EQUAL PARTS

1. Chebulic myrobalans (seed removed)
2. Belleric myrobalans (seed removed)
3. Emblic myrobalans (seed removed)

Preparation :

Dry and prepare choorna by powdering and sieving.

Action and uses :

Astringent. Laxative, antibacterial. Relieves constipation. It is given in coughs with honey ; in constipation with hot water ; and in conjunctivitis, its decoction is used.

Used as a general tonic with equal quantities of honey and ghee. A decoction of this choorna is used to wash and clean wounds and ulcers.

Dose :

When used internally give 1 to 2 gms. Mix with some honey and take in the form of a paste.

58. THRIKATU CHOORNA
(I.M.P.C.P.)

Drugs required :

ALL EQUAL PARTS

1. Dry ginger
2. Long pepper
3. Black pepper

Preparation :

Clean all the drugs, dry and powder Sieve and store.

Action and uses :

Digestive, carminative and antiperiodic. Used in indigestion, dyspepsia, flatulance and intermittent fevers. Useful in coughs and bronchitis when given with sugar and honey. In coma and drowsiness, a small quantity of powder is mixed in water and dropped in the nostrils.

Dose :

½ to 1 gm. Twice or thrice a day.

59. THIRIVIT CHOORNA (I.M.P.C.P.)

Drug required :

1. Black turpith (some quantity).

Preparation :

Dry, powder, sieve and store.

Action and uses :

Laxative. Useful in habitual constipation. When given to patients suffering from piles, it causes free motion with out any discomfort.

Dose :

2 to 4 gms. Given at bed time with hot water, sugar or honey.

60. VAISWANARA CHOORNA
(Ashtanga hridya : Gulma chikithsa)

Drugs required :

	parts.
1. Rock salt ..	1
2. Henbane seeds (cumin seeds by some) ..	2
3. Ajowan fruits ..	3
4. Long pepper ..	4
5. Dry ginger ..	5
6. Chebulic myrobalan (without seeds) ..	15

Preparation :

Powder separately and mix after sieving.

Action and uses :

Digestive, carminative and mild laxative. Useful in loss of appetite, dyspepsia, indigestion and flatulance.

Dose :

1 gm to 2 gms. Twice or thrice daily with hot water, dry ginger decoction, or with sugar and hot water.

61. YASTI CHOORNA
(I.M.P.C.P.)

Drug required :

1. Liquorice (some quantity).

Preparation :

Dry, powder, sieve and store.

Action and uses :

Used in hoarseness of voice. It relieves coughs and bronchitis.

Dose :

1 to 2 gms. with honey twice or thrice a day.

62. AVIPATHIKARA CHOORNA TABLETS

1 gm. tablets are made from Avipathikara choorna with the help of tablet pressing machine. Some suitable adhesive and disintegrants are used to facilitate tablet pressing. **Dose :** as for choorna.

63. DRAKSHADI CHOORNA TABLETS

500 mg. tablets. **Dose :** as for choorna.

64. DADIMASHTAKA CHOORNA TABLETS

500 mg. tablets. **Dose :** as for choorna.

65. ELADI CHOORNA TABLETS

500 mg. tablets. **Dose :** as for choorna.

66. GANGADHARA CHOORNA TABLETS

500 mg. tablets. **Dose :** as for choorna.

67. MAHASUDHARSANA CHOORNA TABLETS

500 mg. tablets. **Dose :** as for choorna.

68. NAVAYASA CHOORNA TABLETS

(Charaka chikitsa : Pandu roga)

Drugs required :

	parts
1. Three pungents each ..	1
2. Three myrobalans (without seeds) each ..	1
3. Nat grass tubers ..	1
4. Embelia fruits ..	1
5. Lead wort root ..	1
6. Calx of iron ..	27

Preparation :

Make very fine powders of drugs 1 to 5 and sieve. Mix number six and press into $\frac{1}{2}$ gm. tablets.

Action and uses :

Haematinic, restorative, blood purifier, cardiac tonic and astringent. Useful in anaemia, jaundice, skin diseases, piles and heart diseases.

Dose :

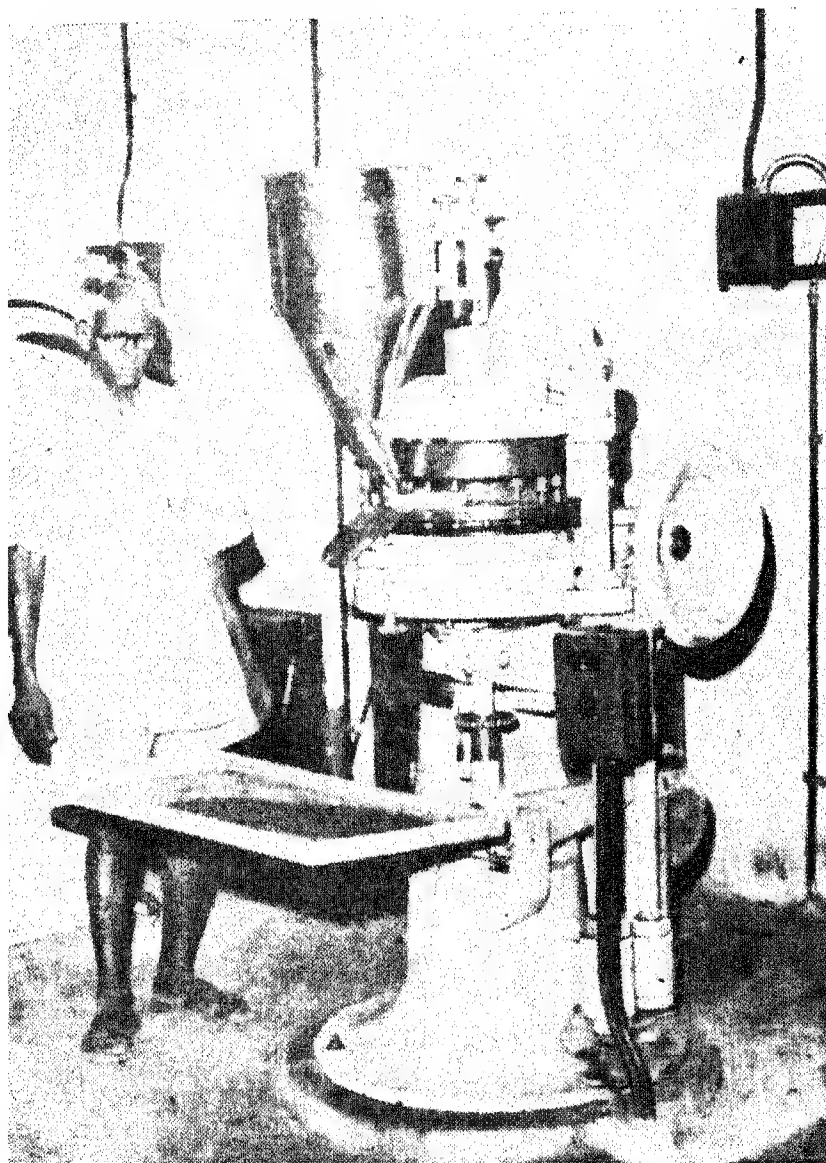
2 to 4 tablets ; twice or thrice a day with honey, ghee, butter milk or hot water.

69. PUSHYANUGA CHOORNA TABLETS

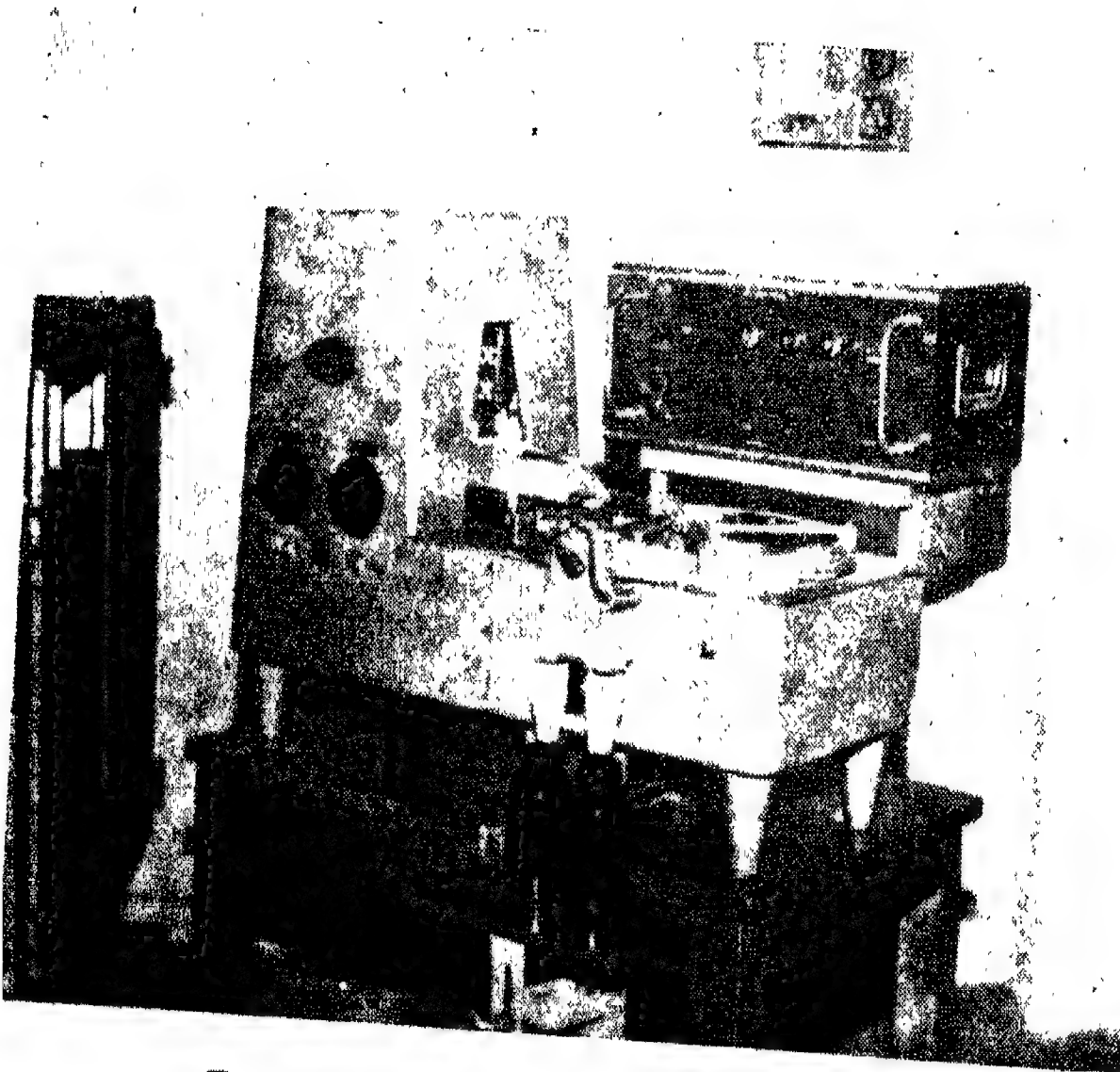
500 mg. tablets.

Uses and dosage :

Similar to Pushyanuga choorna.



Compressing as tablets



Tablet counting by electronic batch counter

70. SARPAGANDHA CHOORNA, TABLETS
(I.M.P.C.P.)

Drug required :

1. Roots of *Rauwolfia serpentina* (sufficient quantity).

Preparation :

Prepare choorna and make 500 mg. tablets.

Action and uses :

Antihypertensive. Sedative. Mild laxative.

Useful in hypertension, reduces blood pressure. Also used in insomnia and irritable states as a tranquiliser.

Useful in nervous excitability and mental disorders with hypertension. Used with withania root powder, Nardus root powder, Indian penny wort powder, milk and honey to reduce excitability and irritation in patients with hypertension.

Dose :

1 to 2 tablets. Twice or thrice a day.

71. SITHOPHALDI CHOORNA TABLETS

Make 1 gm. tablets of Sithophaladi choorna. Action, uses and dosage, similar to Sithophaladi choorna.

72. SUDHARSANA CHOORNA TABLETS

500 mg. tablet. Action uses and dosage similar to Sudharsana choorna.

73. TALEESADI CHOORNA TABLETS

500 mg. tablets. Action uses and dosage similar to Taleesadi choorna.

SECTION IV

GHRITA

Concept and Terminology :

The ghrita are medicated ghee preparations which contain the fat soluble medicinal principles of the drugs used in the particular preparation.

Preparation :

The basic principle of preparation is transfer of the fat soluble active principles of the drugs, to ghee, which is collected at the end of the process. This is done by boiling the pastes of drugs in a mixture of ghee and 'water' until all the water is lost by evaporation.

So the three important constituents in the ghrita preparation, are (1) the ghee (2) the aqueous medium which may be in the form of decoctions, juices etc., and (3) the paste of drugs.

Ghee :

The ghee used in the preparation of medicines should be unadulterated and preferably old, but not impaired of its natural flavour and taste.

The Aqueous media :

The aqueous media may be either in the form of decoction of drugs or juices from fresh herbs, or even milk or cow's urine. The aqueous media are in general taken in larger quantities than the quantity of ghee used for the preparation. Usually the aqueous medium is 4 times the quantity of ghee used.

The paste of drugs :

The paste is prepared by grinding the drugs in a mortar, when fresh herbs are used. Water should not be added. When dry drugs are to be made into a paste, the addition of water is necessary. Sometimes other liquids are prescribed for addition during the process of grinding.

If a recipe does not specify the constituent drugs of a paste, the same drugs mentioned for the preparation of the decoction in small quantity are made into a paste and used.

Sometimes the recipe will merely give some drug names and ghee, without specifying how to use them. Then, a decoction is prepared from the drugs mentioned, and a paste is also prepared out of the same drugs for the preparation of the medicine.

The method of preparation :

1. A wide mouthed vessel which is more like a large shallow pan. This should be made of brass or copper and coated with tin inside. Stainless steel vessels serve best and so, stainless steel ware is preferred in industry.

2. Strong spatulae with long handles for mixing the medicine during the preparation. These also should be preferably of stainless steel.

3. Laddle for collecting the ghee (ghrita).

4. Mortar and pestle for grinding the drugs.

5. Fine clean cloth for filtration.

6. The drugs enumerated in the recipe.

(In factories, heating and boiling of ghrita are done in large steam jacket pans. This type of treatment prevents charring of ingredients and ensures the production of medicines of uniform quality. The steam pressure and temperature are indicated by gauges. For the preparation of pastes, electrically driven pulverisers and mortars are used. Decoctions are also prepared in steam heated boilers).

The Process :

The ingredients made ready for the preparation are put in the pan and the ghee is added and mixed. The pan is heated with mild fire which gradually melts the ghee. When all the ghee has melted, the intensity of fire is increased until the mixture begins to boil and the intensity is maintained throughout. The mixture is constantly stirred and continuously mixed to ensure that no charring and consequent sticking of the materials to the bottom of the vessels takes place. With the loss of water, the noise of boiling comes down and the particles of the drugs, settle down. The preparation should be taken off the oven or heating should be stopped when all the water is lost. To ensure whether all the water is lost, a little of the sediment is rolled and ignited. If it burns with a flickery flame and spurting noise, it indicates that water is still present. When the flame is silent and steady it denotes that complete dehydration has been effected.

It may be claimed that the paste could be rolled into a wick if the water is totally lost, by rolling it between the fingers. This is an unreliable test because at this stage there is water in the paste, which could be demonstrated by igniting it.

Just when the preparation contains traces of water it is known as mild stage and when it is totally dehydrated, the preparation is said to have attained the medium stage and when the material is totally dehydrated and the paste is fried in the ghee, the preparation is said to have attained the hard stage. These three stages are known as Mridupaka, Madyamapaka and Kharapaka respectively, in ayurvedic terminology.

When the preparation has attained the required stage (it is usually the medium stage or Madhya Paka, unless otherwise specified in the recipe), heating is stopped and the pan is taken off the oven.

Collection of Ghrita :

The preparation is then kept aside to cool down. When it has come down in temperature sufficiently for safe handling it is filtered through a cloth, to remove the suspended particles of drugs. However when the volume of the ghrita is large, it may be transferred with a laddle and filtered. When all the ghrita is thus collected, the container with the drug paste is placed in a slanting position so that the ghrita soaked in the sediment gets separated by gravitation and this also is taken. Usually some ghrita will still, remain in the paste and may be lost.

So, the paste is pressed through a cloth when it is warm and the ghrita is collected. In large scale manufacturing the paste is put in a mechanical press and ghee expressed by pressure.

The Use of ghrita :

The ghrita will solidify when cooled and usually it is taken in this form. In order to mask the druggy

flavour and taste, some sugar is mixed with the ghrita before administration. Ghrita are usually taken before meals. These medicines are useful and prescribed to emaciated and run down patients, with very low appetite and digestion, dry skin, constipated bowels, mentally worried and tired of drugging.

Storage :

Ghrita are stored in wide mouthed glass bottles with tight stoppers.

74. AMRITA PRASHA GHRITA

(Sahasrayoga : Ghrita Prakama)

Drugs required :

	litre
1. Ghee	1
2. Cow's milk	1
3. Juice from emblic myrobalan-fresh	1
4. French honey suckle juice	1
5. Sugarcane juice	1
6. Juice * expressed from goat's meat	1
	gms.
7. Leptadenia stems	15
8. Eight drugs each	15
9. Liquorice	15
10. Dry ginger	15
11. Asparagus root	15
12. Coccinia cordifolia roots	15
13. Spreading hog weed roots	15
14. Sida roots (bala roots)	15
15. Beetle killer roots	15
16. Climbing nettle roots	15
17. Round zedoary	15

		Kg.
18.	Phyllanthus niruri roots	.. 15
19.	Long pepper	.. 15
20.	Water chest-nut kernels	.. 15
21.	Alligator yam	.. 15
22.	Five roots—lesser each	.. 15
23.	Raisins	.. 15
24.	Indian walnut	.. 15
25.	Date fruits	.. 15
26.	Wild dates	.. 15
27.	Almonds kernel	.. 15
28.	Copra	.. 13
29.	Black pepper	.. 25
30.	Four aromatics each	.. 25
31.	Sugar	.. 2500
32.	Honey	.. 2500

Preparation :

Prepare a soft paste of 7 to 28. Prepare ghritha with the first six liquid drugs and this paste. After cooling and filtering the ghritha (which is still in the liquid stage) add fine powders of 29 to 31 and add honey.

Action and uses :

Restorative. Useful in nervous debility, loss of weight. Given during convalescence as pick up.

Dose :

5 to 10 gms. with hot cow's milk. Twice or thrice a day depending upon the digestive capacity.

* To prepare this boil sufficient goat's flesh in water until the flesh is cooked. 1 part by weight of flesh is boiled in 4 parts by weight of water until reduced to 1 litre. The water and juice from the boiled flesh is collected.

75. ASOKA GHRITHA

(Bhaishajyaratnavali . Streeroghadhikara)

Drugs required :

	litres
1. Ghee	.. 0.75
2. Decoction* of Asoka bark	.. 0.75
3. Cumin seeds—decoction*	.. 0.75
4. Rice washed water	.. 0.75
5. Goat's milk	.. 0.75
6. Eclipta prostrata juice	.. 0.75
	gms.
7. Eight drugs each	.. 25
8. Cudappah almond (Sara seeds)	.. 25
9. Wild dates	.. 25
10. Berberis extract (or false calumba (extract))	.. 25
11. Liquorice	.. 25
12. Asoka root bark	.. 25
13. Raisins	.. 25
14. Asparagus roots	.. 25
15. Amaranthus spinosus roots	.. 25
16. Sugarcandy	.. 400

Preparation :

Prepare a soft paste of 7 to 15 and prepare ghritha by boiling it with 1 to 6. Add to the filtered ghritha powders of 16 when it is cool.

(* For decoctions 2 and 3, boil 800 gms. of the drug in 3 litres of water and reduce to $\frac{1}{4}$).

Action and uses :

Uterine tonic, sedative and nervine tonic. It is used in sterility in females and menorrhagia, metrorrhagia, dysmenorrhoea, leucorrhoea etc.

Dose :

8 to 15 ml. with hot milk or any other suitable medicine according to the disease.

76. BRAHMI GHRITHA

(Sahasra yoga : Ghritha prakarana)

Drugs required :

1. Juice of thyme leaved gratiola (Bacopa herb)	(Litres) ..	3
		gms.
2. Ghee	..	750
3. Turmeric	..	50
4. Emblic myrobalans	..	50
5. Turpith roots	..	50
6. Chebulic myrobalans	..	50
7. Long pepper	..	12
8. Embelia fruits	..	12
9. Rock salt	..	12
10. Sweet flag	..	12
11. Sugarcandy	..	12

Preparation :

Prepare ghritha using a paste of 3 to 10, ghee and also the juice of No. 1. Apply mild fire and then moderate heat. Collect ghee when warm and add sugar-

candy powder to it. (If the collection of ghee is attempted after complete cooling, much ghee is lost in the sediment. So it is done when it is sufficiently warm).

Action and uses :

"Brain and nerve" tonic. Restorative and stimulant. Improves memory.

Dose :

8 to 15 gm. With hot milk, powder of three pungents and sugarcandy

77. BRIHACCHAGALADY GHRITHA

(Bhaishajyaratnavali : Vatavyadhyadhikara)

Drugs required :

		gms.
1.	Goat's meat	5000
2.	Ten roots Total	5000
3.	Withania roots	5000
4.	Sida roots	5000
		litres
5.	Milk	3
6.	Asparagus roots—fresh juice	3
7.	Ghee	3
		gms.
8.	Leptadenia reticulata	25
9.	Liquorice	25
10.	Raisins	25
11.	Eight drugs each	25
12.	Water lily root (rhizome)	25

		gms.
13.	Nut grass	.. 25
14.	Sandalwood	.. 25
15.	Lesser glangal	.. 25
16.	Unifoliate tick trefoil	.. 25
17.	Sweet smelling hare foot	.. 25
18.	Two sarsaparillas	.. 25
19.	Costus root	.. 25
20.	Zedoary round	.. 25
21.	False calumba	.. 25
22.	Fruits of roxburgh's tree of beauty	.. 25
23.	Three myrobalans each	.. 25
24.	Indian valerian	.. 25
25.	Himalayan silver fir leaves	.. 25
26.	Himalayan cherry wood	.. 25
27.	Cardamoms	.. 25
28.	Cinnamon leaves	.. 25
29.	Asparagus roots	.. 25
30.	Nagakeshar stamens	.. 25
31.	Jasmine flowers	.. 25
32.	Cordiander fruits	.. 25
33.	Madder-Indian	.. 25
34.	Pomogranate fruit rind	.. 25
35.	Himalayan cedar wood	.. 25
36.	Piper ārauntiacus	.. 25
37.	Elavaluka	.. 25
38.	Embelia fruits	.. 25
39.	Cumin seeds	.. 25
40.	Sugar	.. 750
41.	Water	(Litres) .. 100

Preparation :

Prepare decoction of 1 to 4 in 100 litres of water and reduce to $\frac{1}{4}$. Make a soft paste of 8 to 39. Prepare

ghritha using the decoction, milk, juice, ghee and this paste. Cool and filter. Add sugar at the end. Mix and preserve.

Action and uses :

Nervine and general tonic. Used in all nervous diseases and as a cardiac tonic. Used also in uterine disorders and concommittent sterility. Acts also as an aphrodisiac.

Dose :

8 to 15 gm. Twice or thrice a day with hot milk.

78. INDHUKANTHA GHRITHA
(Sahasra yoga : Ghrithaprakarana)

Drugs required :

	gms.
1. Bark of indian beech tree ..	50
2. Bark of himalayan cedar ..	50
3. Root of unifoliate tick trefoil ..	50
4. Root of sweet smelling hare foot ..	50
5. Root of jacquin's night shade ..	50
6. Root of Indian night shade ..	50
7. Root of small caltrops ..	50
8. Bael roots ..	50
9. Root of spinous fire brand tree ..	50
10. Root of Indian trumpet flower tree ..	50
11. Root of cashmere tree ..	50
12. Root of yellow flowered fragrant trumpet flower ..	50

13. Water	(Litres) ..	10
		gms.
14. Ghee	..	800
15. Milk	..	800
16. Long pepper	..	50
17. Long pepper roots	..	50
18. Roots of cubebs	..	50
19. Lead wort root	..	50
20. Dry ginger	..	50
21. Potassium carbonate	..	50

Preparation :

Prepare a decoction of 1 to 12 in water and reduce to $\frac{1}{2}$. Using this decoction, ghee, milk and soft paste of 16 to 21 prepare ghritha, filter when hot and store.

Action and uses :

Antitoxic and antiperiodic. Used in intermittent fevers, gastric and duodenal ulcers and pthisis.

Dose :

8 to 15 ml. with milk, tinospora starch and sugar.

79. JATHYADHI GHRITHA

(Ashtanga hridya, Uttara sthana, Vrana vignana :
Prathishedhadhyaya)

Drugs required :

		gms.
1. Jasmine leaves	..	50
2. Margosa leaves	..	50
3. Wild snake gourd leaves	..	50

	gms.
4. Picrorhiza ..	50
5. False calumba stem (ceylon calumba) ..	50
6. Turmeric ..	50
7. Indian sarsaparilla ..	50
8. Indian madder ..	50
9. Chebulic myrobalan ..	50
10. Bees wax ..	50
11. Copper sulfate ..	50
12. Liquorice root ..	50
13. Indian beech seed kernel ..	50
14. Ghee ..	800
15. Water (Litres) ..	10
16. A paste of drugs 1 to 13 each ..	15

Preparation :

Prepare decoction of 1 to 9 and 12 and 13 using the given quantity of water and reduce it to $\frac{1}{2}$. Now add 10 and 11 to it. Prepare ghritha using this liquid and ghee with the paste (16)

Action and uses :

For **External Application Only** in chronic and septic ulcers to prevent microbial multiplication and to promote healing. Also in syphilitic ulcers.

* Some people take 5 litres of water and 1.25 kgs. of ghee and other drugs as above and directly prepare ghritha without preparing any decoction.

80. KALYANAKA GHRITHA

(Bhaishajya ratnavali : Unmadhadhikara)

Drugs required :

	gms.
1. Colocynth herb	.. 12
2. Three myrobalans each	.. 12
3. Piper araunticacus	.. 12
4. Himalayan cedar wood	.. 12
5. Elavalukam—(malabar drug)	.. 12
6. Unifoliate tick trefoil	.. 12
7. Indian valerian	.. 12
8. Turmeric	.. 12
9. False calumba stem (ceylon calumba)	.. 12
10. Two sarsaparillas each	.. 12
11. Fruits of Roxburgh's tree of beauty	.. 12
12. Water lily rhizome	.. 12
13. Cardamoms	.. 12
14. Indian madder	.. 12
15. Croton roots	.. 12
16. Pomogranate rind	.. 12
17. Nagakeshar stamens	.. 12
18. Himalayan silver fir leaves	.. 12
19. Jaquin's night shade	.. 12
20. Jasmin flowers—fresh	.. 12
21. Embelia fruits	.. 12
22. Sweet smelling hare foot	.. 12
23. Costus root	.. 12
24. Red sanders	.. 12
25. Lotus rhizome	.. 12
26. Ghee	.. 800
27. Water	.. 3500

Preparation :

Prepare a soft paste of 1 to 25. Prepare ghritha using this paste, ghee and water.

Action and uses :

Nervine and brain tonic. Antiperiodic and restorative. Given to women as uterine tonic and to promote fertility. Used for improving health and body at puberty along with aswagandha lehyam and palm sugar. This good combination is generally for girls. It tones up the uterus. In debility it is given with goat's milk. It is used in chronic and malarial fevers also. It improves memory, calms anxiety and suppresses insanity.

Dose :

8 to 15 ml. Twice or thrice daily.

✓81. MAHA THRIPHALADHI GHRITHA

(Bhaishajyaratnavali : Netra rogadhikara)

Drugs required :

		ml.
1.	Decoction of three myrobalans	.. 750
2.	Eclipta prostrata juice	.. 750
3.	Adhatoda leaf juice	.. 750
4.	Asparagus root juice	.. 750
5.	Goat's milk	.. 750
6.	Tinospora juice	.. 750
7.	Emblic myrobalan juice	.. 750
8.	Ghee	.. 750
		gms.
9.	Long pepper	.. 50
10.	Sugar	.. 50
11.	Raisins	.. 50
12.	Three myrobalans each	.. 50

	gms.
13. Blue water lily rhizome ..	50
14. Liquorice ..	50
15. Tinospora stem ..	50
16. Jaquin's night shade ..	50

Preparation :

Prepare a soft paste of 9 to 16. Prepare ghritha using this paste the liquids and ghee. Filter and store.

Action and uses :

Appetiser and tonic. It is especially good for the eyes in that it improves the sight and strengthens the muscles associated with the eye. It is also used as eye drops.

Dose :

8 to 15 ml. with hot milk. Twice or thrice daily.

82. MAHA THIKTHAKA GHRITHA

(Ashtanga hridya : Kushta chikithsa)

Drugs required :

	gms.
1. Dita bark ..	50
2. Mollugo cerviana ..	50
3. Cassia pod ..	50
4. Picrorhiza ..	50
5. Sweet flag ..	50
6. Three myrobalans each ..	50
7. Himalayan cherry wood ..	50

		gms.
8.	False pareira brava	50
9.	Turmeric	50
10.	False calumba stem (ceylon calumba)	50
11.	Two sarsaprillas (each)	50
12.	Long pepper	50
13.	Margosa bark	50
14.	Sandalwood	50
15.	Liquorice	50
16.	Colocynth	50
17.	Tellicherry seeds	50
18.	Tinospora	50
19.	Chirata	50
20.	Vetiver	50
21.	Adhatoda roots	50
22.	Bow string hemp rhizomes	50
23.	Asparagus roots	50
24.	Wild snake gourd roots	50
25.	Indian atees	50
26.	Nut grass tubers	50
27.	Indian beech tree bark	50
28.	Climbing nettle roots	50
29.	Large long pepper	50
		litres
30.	Water	12
31.	Juice of emblic myrobalans	3
32.	Ghee	3
33.	Soft paste of 1 to 29 each (gms.)	10

Preparation :

Boil 1 to 29 in water and reduce decoction to $\frac{1}{4}$. Prepare ghritha using this decoction, the paste, ghee and the juice.

Action and uses :

Blood purifier, antiinfective, appetiser and restorative. Used in skin diseases such as, dermatitis, eczema, urticaria and leprosy.

Dose :

8 to 15 ml. Twice or thrice with hot milk.

83. NARASIMHA GHRITHA

(Ashtanga hridhya : Rasayana vidhi)

Drugs required :

1. Water	(Litres) ..	8
		gms.
2. Black catechu	..	50
3. Lead wort root	..	50
4. Sisoo tree bark	..	50
5. Chebulic myrobalans without seeds	..	50
6. Belleric myrobalans without seeds	..	50
7. Embelia fruits	..	50
8. Purified marking nuts	..	50
9. Purified iron filings	..	50
10. Madras kino wood	..	50
		litres
11. Milk	..	2
12. Eclipta prostrata juice	..	4
13. Decoction of three myrobalans	..	6
14. Ghee	..	8
		gms.
15. Calx of iron	..	110
16. Sugar	..	1500

Preparation :

Boil 2 to 10 in 8 litres of water and reduce the decoction to 1. Keep the decoction in the sun for 3 days. On the fourth day stir the liquid and boil. Reduce to 1/2, filter and keep. Add 11 to 15 and prepare ghritha. When the ghritha is cool, add sugar and mix.

Action and uses :

Tonic, aphrodisiac, blood purifier, haematinic and promotes longevity.

Dose :

8 to 15 ml. Twice or thrice daily with sugar, honey and hot milk.

84. PANCHI THIKTHA GUGGULU GHRITHA

(Ashtanga hridaya : Vata vyadhi chikithsa)

Drugs required :

		gms.
1. Margosa bark	..	500
2. Tinospora	..	500
3. Adhatoda leaves	..	500
4. Wild snake gourd plant	..	500
5. Indian night shade	..	500
6. Water	(Litres) ..	12.5
		gms.
7. Ghee	..	800
8. False pareira brava	..	12
9. Embelia fruits	..	12
10. Himalayan cedar wood	..	12
11. Large long pepper	..	12

		gms.
12.	Two alkalies each	.. 12
13.	Dry ginger	.. 12
14.	Turmeric	.. 12
15.	Rue	.. 12
16.	Cubebs	.. 12
17.	Costus root	.. 12
18.	Staff tree seeds (Tejovathi)	.. 12
19.	Black pepper	.. 12
20.	Tellicherry seeds	.. 12
21.	Ajowan seeds	.. 12
22.	Lead wort root	.. 12
23.	Picrorhiza	.. 12
24.	Purified marking nut	.. 12
25.	Sweet flag	.. 12
26.	Long pepper root	.. 12
27.	Madder	.. 12
28.	Indian atees white	.. 12
29.	Indian atees black	.. 12
30.	Cumin seeds	.. 12
31.	Purified Bdellium	.. 60

Preparation :

Boil 1 to 5 in water and reduce the decoction to $\frac{1}{8}$. Prepare a soft paste of 8 to 30. Prepare ghritha with the decoction, ghee and this paste. Put the bdellium in a cloth and hang it in the ghritha when boiling until all of it is molten and mixed with the medicine. Filter and cool the ghritha.

Action and uses :

Blood purifier, antiinfective and antiperiodic. Antiinflammatory and mildly laxative. Used in all chronic skin diseases.

Used in gout and chronic skin diseases with decoction of madder and sarsaparilla.

Used in chronic fevers, jaundice and anaemia with "Thaleesadhi choorna". Used in the treatment of Syphilis with "madhusnuhi rasayana" and palm sugar. In leucoderma it is given with a decoction of Psoralea seeds. In leprosy it is given with "Khadira arishta" and "Amritha bhallataka lehya."

Dose :

8 to 15 ml. Gives as directed. Twice or thrice daily.

85. PHALA SARPIS (GHEITHA)

(Ashtanga Hridaya : Guhya roga prathishedha)

Drugs required :

	gms.
1. Madder	.. 12
2. Costus root	.. 12
3. Indian valerian	.. 12
4. Three myrobalans—each	.. 12
5. Sweet flag	.. 12
6. Turmeric	.. 12
7. False calumba (ceylon calumba)	.. 12
8. Liquorice	.. 12
9. Ajowan seeds	.. 12
10. Picrorhiza	.. 12
11. Asafoetida	.. 12
12. Withania roots	.. 12
13. Asparagus roots	.. 12
14. Water lily rhizome	.. 12

		gms.
15. Raisins	..	12
16. Sandalwood	..	12
17. Red sanders	..	12
18. Ghee	..	800
19. Milk	(Litres) ..	3.5
20. Sugar	..	150

Preparation :

Prepare a soft paste of 1 to 17. Prepare ghritha using this paste, ghee and milk. When the ghritha is cooled, add sugar, mix well and preserve.

Action and uses :

Restorative. Useful in the treatment of the diseases and disorders of the urinogenital systems of the male as well as the female. It promotes fertility of the genital system. Uterine tonic ; given during pregnancy and amenorrhoea.

Dose :

8 to 15 ml. with hot milk ; twice or thrice daily

86. SATHAVAREE GHRITHA
(Sahasra yoga : Ghritha prakarana)

Drugs required :

		gms
1. Ghee	..	750
2. Asparagus root juice	..	1500
3. Goat's milk	..	3000
4. Small caltrops	..	100

	grs.
5. Large caltrops ..	100
6. Tinospora ..	100
7. Indian sarsaparilla ..	100
8. Dog barnboe roots ..	100
9. Jacquin's night shade ..	100
10. Liquorice ..	25
11. Three pungents each ..	25
12. Small caltrops ..	25
13. Flrs. of Roxburgh's tree of beauty (Priyangu) ..	25
14. Euphorbia herb ..	25
15. Black asphalt (black bitumen) ..	25
16. Aerva lanata roots ..	25
17. Cardamoms ..	25
18. Cinnamon bark ..	25
19. Cinnamon leaves ..	25
20. Sugarcandy ..	100
21. Honey ..	25

Preparation :

Prepare a soft paste of 4 to 19. Prepare ghritha with the juice milk, ghee, and the paste. Filter, cool and add powder of sugarcandy and honey.

Action and uses :

Indicated in diseases and disorders of the urinary system. Useful in urethritis, dysurea and cystitis.

Dose :

8 to 15 ml. Twice or thrice daily with hot milk.

87. SHATPHALA GHRITHA (Ashtanga Hridya : Udhara roga)

Drugs required :

	litres
1. Decoction of the ten roots	.. 3
2. Curd supernatant (whey)	.. 6
	gms.
3. Ghee	.. 750
4. Five spices (each)	.. 50
5. Potassium carbonate	.. 50

Preparation :

Prepare a soft paste of 4 & 5. Add it to the decoction and add the curd supernatant and ghee. Prepare ghritham.

Action and uses :

Appetiser, digestive and antitoxic. Used in the treatment of Gastric and duodenal ulcers, abdominal pain, and loss of appetite and digestive disorders.

Dose :

8 to 15 ml. With hot milk. Twice or thrice daily.

88. SUKUMARA GHRITHA (Sahasra yoga : Ghritha prakarana)

Drugs required :

	gms.
1. Spreading hog weed root (Punarnava)	.. 5000
2. Ten roots total	.. 500
3. Euphorbia herb	.. 500

	gms.
4. Withania roots ..	500
5. Castor roots ..	500
6. Asparagus roots ..	500
7. Root of thatch grass ..	500
8. Root of dog bamboo ..	500
9. Root of sugarcane ..	500
10. Bermuda grass ..	500
11. Indian globe flower ..	500
12. Water (Litres) ..	50
13. Castor oil ..	800
14. Ghee ..	1600
15. Milk ..	1600
16. Jaggery ..	1500
17. Long pepper ..	100
18. Long pepper root ..	100
19. Rock salt ..	100
20. Liquorice ..	100
21. Raisins ..	100
22. Ajowan seeds ..	100
23. Dry ginger ..	100

Preparation :

Prepare a decoction of 1 to 11 in the given quantity of water and reduce to $\frac{1}{2}$. Prepare a soft paste of 17 to 23. Prepare ghritha using this paste, ghee, decoction and milk. Filter when hot and cool.

Action and uses :

Restorative. Laxative. Used in the treatment of diseases relating to the reproductive system. Also useful in the treatment of intestinal and gastric disorders and piles.

Dose :

8 to 15 ml. With hot milk ; twice or thrice daily.

89. THIKTHAKA GHRITHA

(Sahasra yoga : Ghritha prakarana)

	gms.
Drugs required :	
1. Wild snake gourd plant ..	50
2. Margosa bark ..	50
3. Picrorhiza ..	50
4. False calumba (ceylon calumba) ..	50
5. False pareira brava ..	50
6. Climbing nettle root ..	50
7. Mollugo cerviana ..	50
8. Bark of Indian beech tree *	50
9. Bark of Indian beech tree *	12
10. Nut grass tubers ..	12
11. Chirata ..	12
12. Tellicherry seeds ..	12
13. Long pepper ..	12
14. Sandalwood ..	12
15. Water (Litres) ..	5
16. Ghee ..	600

Preparation :

Prepare a decoction using the first 8 drugs and water and reduce to $\frac{1}{2}$. Prepare a paste of 9 to 14. Prepare ghritha, using this paste, the decoction and ghee.

Action and uses :

Blood purifier, antiinfective, astringent and haematinic. Used in the treatment of chronic skin diseases, ulcers, eczema, enteropathies and anaemia.

Dose :

8 to 15 ml. With hot milk, twice or thrice daily.

* Some people use Thyme leaved gratiola.

90. VIDARIYADHI GHRITHA
(Ashtanga hridaya : Kasa chikithsa)

Drugs required :

	gms.
1. French honey suckle tubers ..	40
2. Castor roots ..	40
3. Scorpion tail plant ..	40
4. Spreading hog weed roots (Punarnava) ..	40
5. Himalayan cedar wood ..	40
6. Wild green gram ..	40
7. Climbing nettle roots ..	40
8. Wild black gram ..	40
9. Asparagus roots ..	40
10. Leptadenia reticulata roots ..	40
11. Falste trumpet flower roots ..	40
12. Indian night shade roots ..	40
13. Jacquin's night shade root ..	40
14. Root of Dita bark tree ..	40
15. Root of sweet smelling hare foot ..	40
16. Roots of small caltrops ..	40
17. Indian sarsaparilla ..	40
18. Coldenia procumbens herb ..	40
	litres
19. Water ..	8
20. Ghee ..	2
21. Milk ..	4

Preparation :

Boil 1 to 8 in the given quantity of water and reduce decoction to $\frac{1}{4}$. Prepare a paste of the drugs used

for the decoction. Prepare ghritha using the decoction, paste, ghee and milk.

Action and uses :

Restorative, cardiac, tonic. Used to promote strength and to prevent infectious diseases.

Dose :

8 to 15 ml. With hot milk ; twice or thrice daily

SECTION V

GUTIKA

Concept and Terminology :

Gutika which are otherwise known as Vati, are pills or tablets.

Preparation :

Equipment required :

1. Drugs mentioned in the recipe.
2. Dishes for keeping the paste.
3. Stone mortar and pestle.
4. Drying pans—enamelled iron tarys are preferred.

(In large scale manufacture of pills and tablets, the preparation of the paste of drugs is done by electrically driven mortars and grinders. For making pills or tablets pill and tablet pressing machines are used which produce pills or tablets of uniform size and weight in large numbers within a short time. Counting is also done by machine).

Process of preparation :

Gutika are made by rolling between the fingers a fine paste of the drugs ground for the particular period of time prescribed. The paste is prepared by grinding the drugs in a mortar with the juices or decoctions of some drugs.

When metals like gold or iron are to be included in a preparation, usually they are added in a calcined state (bhasma) unless the contrary is mentioned. The organic drugs are dried well, powdered and then subjected to grinding with plant juices or decoction. The paste has to be ground for a long time (the time mentioned in the recipe) to attain a homogenous consistency.

To facilitate easy rolling between the fingers, traces of ghee are taken on finger tips. Modern methods of grinding and pill making are employed, in large scale manufacture. The gutika should be of the prescribed size and/or weight.

The wet pills are dried in shade for hardening and removing the moisture.

Storage :

Pills are stored in glass bottles with good lids. Unbreakable plastic or polythene boxes may also be used.

Insufficient drying or subsequent dampening of pills by improper packing lead to the development of foul odor and fungal growth. Such material should be discarded.

91. BHALLATAKA VATI (I.M.P.C.P.)

Drugs required :

	part
1. Purified marking nuts*	1
2. Sesame seeds	1
3. Fine powder of chebulic myrobalans	1
4. Cane jaggery	1

Preparation :

Put 1, 2 and 4 in a mortar and grind well. Add 3 at the end of the process and continue grinding until the material attains the consistency necessary for its being rolled into pills. Make into 200 mg. pills.

Action and uses :

Blood purifier. Antisymphilitic Useful also in chronic skin diseases. Useful also in spermatorrhoea.

Dose :

1—2 pills ; twice a day, depending upon the tolerance of the patient. It is better to give smaller dose first and then increase the dosage if felt conducive.

* Marking nuts are purified by boiling the seeds after cutting them into two in a mixture of cow dung and water for a minimum period of 3 hours. While splitting and breaking the nuts, avoid contact with the oil that comes out as it raises blisters.

92. BILWADI GUTIKA

(Ashtanga Hridya : Uttarasthana : Sarpavisha
Chikitsa)

Drugs required :

	part
1. Bael roots ..	1
2. Sacred basil flowers ..	1
3. Indian beech seed kernels ..	1
4. Indian valerian ..	1
5. Three myrobalans each ..	1
6. Three pungents each ..	1
7. Turmeric ..	1
8. False calumba stem (ceylon calumba) ..	1
9. Himalayan cedar wood ..	1
10. Goat's urine-sufficient quantity	

Preparation :

Prepare a paste of 1 to 9 adding 10 during grinding.
Make 500 mg. tablets. Grind at least for 3 days.

Action and uses :

Antidote to snake poisons and bites of other reptiles and stings of insects. Useful in rabid dog bite and bites of other mammals. Useful in chlorea, diarrhoea and dysentery.

Dose :

1 tablet a day. Give before food.

93. CHANDANADI VATI
(I.M.P.C.P.)

Drugs required :

	parts
1. Liquorice ..	3
2. Cubebs ..	3
3. Plantain ash ..	1
4. Gum acacia ..	3
5. Sandalwood oil ..	1
6. Balsam copaiba ..	1
7. Mastiche ..	1
8. Rose water—sufficient quantity ..	1

Preparation :

Powder Gum acacia and rub with rose water adding powders of Liquorice, Cubebs, Plantain ash and Mastiche. When the consistency for making pills has been obtained add sandalwood oil and balsam copaiba. Grind to mix them completely and make 500 mg. tablets.

Action and uses :

Diuretic, Urinary sedative, useful in urethritis, cystitis and gonorrhoea.

Dose :

1 to 2 tablets a day.

94. NAVAKA GUGGULU

(Bhaishajyaratnavali : Medorogadhikara)

Drugs required :

	part
1. Three pungents each	1
2. Three myrobalans each	1
3. Lead wort root	1
4. Nut grass tubers	1
5. Embelia fruits	1
6. Purified bdellium	3
7. Three myrobalans each	1

Preparation :

Take 7 and put in 8 parts by weight of water. Boil and reduce decoction to $\frac{1}{4}$ th. Put gum Guggul into the decoction and heat until the gum becomes softened. Add the rest of the drugs in fine powder form to this and grind until the pill rolling consistency is attained. Make 500 mg. pills.

Action and uses :

Useful in rheumatic disorders, arthrities, sciatica and chronic ulcers and boils.

Dose :

1 to 3 tablets.

95. SANJEEVANEE VATI

(Sarangadhara Samhita : Madhyama Khanda)

Drugs required :

	part
1. Embelia fruits	1
2. Dry ginger	1
3. Long pepper	1
4. Three myrobalans each	1
5. Sweet flag	1
6. Tinospora starch	1
7. Purified marking nuts	1
8. Purified aconite	1
9. Cow's urine—sufficient quantity.	

Preparation :

Grind 6, 7 and 8 with cow's urine, add the other drugs in powdered form and grind. Make 125 mg. tablets.

Action and uses :

Appetiser, digestive and antimicrobial. Useful in dyspepsia when given with a decoction of dry ginger and black pepper. In cholera it is given with a decoction of ajowan seeds, cumin seeds and margosa bark. In fevers it is given with a decoction of dry ginger, black pepper, cumin seeds and lesser glangal. In scorpion stings and snake bite it is given with the juice of betle leaves and/or tinospora starch.

Dose :

1 to 2 tablets twice or thrice daily.

SECTION VI

KSHARA

Concept and Terminology :

Kshara are ashes of plant drugs or the derivatives of such ashes in the form of solutions or crystals, all of which have the basic quality of being alkaline. According to their state, liquid or solid, they are called as Drava kshara (liquid form) and Choorna kshara (amorphous form) respectively.

In the Science of Ayurveda, five elemental components of drugs are recognised as for other substances in this universe. These elemental components are known as the 'pancha bhoota' (5 elements).

They are :

- Agnibhoota—equated with fire
- Jalabhoota—equated with water
- Akashabhoota—equated with aether
- Prithveebhoota—equated with earth
- Vayubhoota—equated with gas

According to such a classification, the kshara belong to the agnibhoota since the properties of kshara are burning and destructive. That simply means the material is 'caustic'.

As the kshara are medicines with caustic and destructive properties, they are applied to destroy keloid, warts etc., which should be got rid of. Kshara are administered internally in some gastro-intestinal disorders.

The kshara are classified into two groups, those that are meant for external application (amorphous state) and those intended for internal administration (liquid state). These two groups are further classified into three groups each, according to their alkalinity or strength as mild, medium and strong.

Preparation :

Equipment required :

1. The drugs enumerated in the formula.
2. The crucible or dish for incinerating the drugs. An earthen crucible with a lid is used when incinerating the material in a closed atmosphere. Usually two pans or bowls of equal size are taken and sealed with a clay smeared ribbon around the rim after putting the material to be incinerated inside. When there is no necessity of incinerating the material in a closed atmosphere, it may be incinerated in a dish. It is better to partially cover the dish to prevent the ashes from being blown away by wind.
3. Vessel for dissolving the ashes in water.
4. Vessel for boiling the solution.
5. Small container or wide dish for crystallisation of the alkali—(for use when crystalline or amorphous kshara are to be prepared).

Process of Preparation :

The drug or drugs from which the kshara are to be prepared are well dried and cleaned to remove extraneous material and then incinerated. The ashes obtained after incineration are mixed with clean potable water and al-

lowed to stand undisturbed for twenty four hours. After this period the water is decanted and taken, which contains the essential substances in solution. In the case of a liquid kshara, the liquid is evaporated until it is reduced to $\frac{1}{4}$ or $\frac{1}{8}$ of the original volume. When an amorphous (or crystalline) kshara is to be obtained, the solution is heated until all the water is lost or until crystals begin to form. The solution that is highly reduced is kept undisturbed over night to obtain crystals that settle down.

Sometimes the ashes are used without any processing. These may have to be prepared into a dark substances or otherwise as directed in the recipe.

Storage :

Kshara, whether in liquid form or in the form of crystals, should be stored in glass bottles or tubes, rubber or cork stoppers should not be used as they will be acted upon by these caustic medicines. Glass or plastic stoppers should be used.

Usage :

Since kshara are caustic in properties, they have to be used and prescribed with due caution.

96. KALYANAKA KSHARA

(Ashtanga Hridya : Arsoroga Chikitsa)

Drugs required :

	part
1. Three pungents each	.. 1
2. Three myrobalans each	.. 1

	part
3. Three salts each	.. 1
4. Lead wort root	.. 1
5. Purified croton seeds—cotyledons	.. 1
6. Purified marking nuts	.. 1
7. Cow's urine—sufficient quantity	
8. Ghee—sufficient quantity	

Preparation :

Take the above drugs in equal quantities by weight and make into a coarse powder. Put the powder in a wide mouthed earthen vessel and pour cow's urine and ghee just enough to soak the powder. Seal the pot and place on fire. Heat until the contents are converted into ashes. Open the pot when cooled and collect the ashes, powder and bottle for use.

Action and uses :

Diuretic, Laxative, Carminative and flushes out toxins. Used in Gastro-intestinal disorders, flatulance, retension of urine, haemorrhoids and anaemias.

Dose :

$\frac{1}{2}$ to 1 gm. once or twice a day mixed with ghee.

97. PANAI VIRALADI KSHARA**(I.M.P.C.P.)****Drugs required :**

Ashes of :

TAKE EQUAL QUANTITY BY WEIGHT

1. Fulmyrah male inflorescences
2. Prickly chaff flower—whole plant
3. Asteracantha longifolia roots
4. Plantain rhizome

Preparation :

There are three methods of preparation.

- (a) The ashes of these drugs are used as such or
- (b) The ashes are dissolved in four volumes of water, allowed to stand for a day and the supernatant decanted and boiled down to $\frac{1}{4}$ and used—or
- (c) The decanted solution of the ashes is boiled, completely till dehydration and the amorphous residue is used. The individual particles are crystalline in form and minute in size.

Action and uses :

Diuretic, Digestive, Carminative and flushes out toxins. Used in ascities, oedema, gastric and intestinal disorders.

Dose :

Ash : $\frac{1}{2}$ to 1 gm. (for children $\frac{1}{2}$ the dose).

Liquid : 3 to 6 ml.

Crystalline residue : 60 to 200 mg.

Any one of the three forms could be administered ;
but the correct dosage should be adhered to.

SECTION VII

KWATHA CHOORNA

Concept and Terminology :

Kwatha choorna are compounded coarse powders which are intended for usage whenever a particular type of decoction is required. (These kwatha choorna are not to be used as choorna).

(The decoctions prepared are of different types depending upon the final volume of decoction. The kwatha choorna are boiled in water until the decoction is reduced to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, or $\frac{1}{16}$ th of the original volume. The decoction thus prepared should be made use of within twenty four hours after it has cooled. If stored for a longer time fungal contamination will occur).

Preparation :

Equipment required :

1. The drugs cleaned and dried.
2. Mortar and pestle.
3. Trays for drying.

Process of preparation :

The drugs that are to go into the composition of the particular kwatha choorna are taken and cleaned. They are perfectly dried and powdered separately and then mixed. The powders should be coarse. When the decoction is prepared, the vessel should be kept open to allow the water vapours to escape.

Pounding the drugs in a mortar until coarsely powdered is sufficient because the Kwatha

choorna should not be a fine powder. If the powder be very fine, the decoction is not easily filtered into a clear liquid; this is due to the fine particles, passing through the filter. In large scale preparation of kwatha choorna, electrically driven disintegraters are used.

Storage :

The kwatha choorna keep good for about an year, if protected from moisture and insect attack. The kwatha choorna should be packed in good glass jars which will not allow the entry of insect's or in similar plastic polythene bags and sealed. These packets are again enclosed in card board boxes.

Usage :

The required concentration of decoction should be prepared from these and used within a day.

98. BHARANGYADI KWATHA CHOORNA

(Sahasra Yoga : Kashaya Prakarna)

		part
1. Beetle killer roots	..	1
2. Nut grass tubers	..	1
3. Mollugo cerviana herb	..	1
4. Climbing nettle herb	..	1
5. Dry ginger	..	1
6. Chirata	..	1
7. Costus root	..	1
8. Long pepper	..	1
9. Jacquin's night shade	..	1
10. Tinospora	..	1
11. Coriander seeds	..	1

Preparation :

Clean the drugs, convert into a coarse powder and store in tightly stoppered containers. When the decoction of this choorna is required 50 gms. of the powder is boiled in 800 ml. of water until reduced to $\frac{1}{8}$ volume. The decoction is filtered when it is cooled.

Action and uses :

Digestive. Carminative, Appetiser, Antiperiodic and expectorant. Anthelmintic. Used in fevers, coughs and bronchitis. Used to expel thread worms (round worms).

Dose :

25 to 50 ml. of decoction ; twice or thrice a day.

99. CHINNARUHADI KWATHA CHOORNA

(Sahasra Yoga : Kashaya Prakarana)

Drugs required :

	part
1. Tinospora root & stem	1
2. Adhatoda leaves	2
3. Chirata	3
4. Mollugo cerviana herb	4
5. Dry ginger	5
6. Nut grass	6
7. Climbing nettle roots	7

Preparation :

Prepare coarse powder of the drugs and mix. Make decoction when required. (50 gm. powder boiled in 800 ml. of water until reduced to 100 ml.)

Action and uses :

Digestive, carminative, antiperiodic, antiinfective, sedative and expectorant. Used in enteric and intermittent fevers with Shadguna Sindoor and Honey. Used in coughs and bronchitis. Used with Crimimudgara rasa to expel round worms.

Dose :

25 to 50 ml. of decoction ; three times a day.

100. DASAMUOLA KWATHA CHOORNA

(Sahasra Yoga : Kashaya Prakarana)

Drugs required :

1. The ten roots each

part
1

Preparation :

Make a coarse powder and prepare decoction when required.

Action and uses :

Cardiac stimulant and tonic. Sedative, expetorant, antiinfective, and antiperiodic. Restorative nervine tonic. Used in Pneumonia, pleurasy and influenza with Kalakoota rasa. Used in enteric fevers and other types of fevers with Jwarankusa Rasa, Sannipatha bhairava and Seetamsu rasa. In paralysis it is given with Swarnavatarakshasa and Vatagajankusa. In facial paralysis it is given with Ksheerabala taila.

Dose :

25 to 50 ml. of decoction ; twice or thrice a day.

101. DASAMULA KATUTRIYADI KWATHA CHOORNA

(Sahasra Yoga : Kashaya Prakarana)

Drugs required :

	part
1. The ten roots each	.. 1
2. Three pungents each	.. 1
3. Adhatoda leaves	.. 1

Preparation :

Make coarse powders and store. Prepare decoction when necessary.

Action and uses :

A decoction of this Kwatha choorna is useful as a digestive, carminative, antiperiodic, sedative expectorant, cardiac tonic and restorative.

It is useful in pneumonia and related diseases of the respiratory system with Rasabhupathi and Honey. In enteric fevers it is given with Kala koota rasa, San-nibathabhairaya etc., in coughs and bronchitis it is given with Seetamsu rasa, Taleesadi choorna and rasabhupathi. It is given in headaches and neuralgia with Swarnavata-rakshasa, Vatagajankusa and other suitable rasas.

Dose :

25 to 50 ml. of decoction ; 3 times a day.

102. GANDHARVA HASTADI KWATHA CHOORNA
(Sahasra Yoga : Kashaya Prakarana)

Drugs required :

	part
1. Roots of castor plant ..	1
2. Bonduc nut (Indian beech tree bark is used) ..	1
3. Lead wort root ..	1
4. Dry ginger ..	1
5. Climbing nettle root ..	1
6. Chebulic myrobalan (seeds removed) ..	1
7. Spreading hog weed (white—Punar-nava) roots ..	1
8. Black musale ..	1

Preparation :

Prepare a coarse powder and extract decoction whenever necessary, by boiling the powder in water.

Action and uses :

Laxative, Digestive, and Carminative. Used in constipation nervous disorders and oedema. Given with jaggery and rock salt for laxative action.

Dose :

25 to 50 ml. of decoction ; either in the early morning or at bed time.

103. MAHARASNADI KWATHA CHOORNA
(Sahasra Yoga : Kashaya Prakarana)

Drugs required :

EQUAL PARTS OF :

1. Lesser galangal
2. Himalayan cedar wood
3. Costus root
4. Bdellium
5. Red ochre
6. Liquorice root
7. Nut grass tubers
8. Three pungents
9. Cuttle fish bone
10. Sandalwood
11. Withania roots
12. Picrorhiza
13. Aloes
14. Sweet flag
15. Turmeric
16. Bala roots (side roots)
17. Eagle wood
18. Tamarind rachis

Preparation :

Prepare coarse powder of the drugs. Extract decoction when required.

Action and uses :

Antirheumatic, and antiinflammatory. Used rheumatic fevers, arthritis, sciatica and neuritis.

Dose :

25. to 50 ml. of decoction ; twice or thrice a day.

104. MANJISHTADI KWATHA CHOORNA

(Sarangadhara Samhita : Madhayamakhandā)

Drugs required :

	part
1. Indian madder ..	1
2. Three myrobalans each ..	1
3. Picrorhiza ..	1
4. Sweet flag ..	1
5. False calumba stem (ceylon calumba) ..	1
6. Tinospora ..	1
7. Margosa bark ..	1

Preparation :

Prepare coarse powder and store. Prepare decoction whenever necessary.

Action and uses :

Blood purifier, antiinfective. Used in chronic skin diseases, eczema, boils etc. with Thikthaka ghritha or Panchathiktha guggulu ghritha. In gout with Maha Yogaraja guggulu, in syphilis with Amrita Bhallataka Lehya or Madhusnuhee rasayana.

Dose :

25 to 50 ml. of decoction ; twice or thrice a day.

105. NIMBADI KWATHA CHOORNA

(Sahasra Yoga : Kashaya Prākaraṇa)

Drugs required :

	part
1. Margosa bark ..	1
2. Tinospora root ..	1

		gms.
3. Dry ginger	..	1
4. Turmeric	..	1
5. Adhatoda roots	..	1
6. Three myrobalans each (without seeds)	..	1
7. Wild snake gourd plant	..	1
8. Jacquin's night shade	..	1

Preparation :

Make coarse powder of the dry drugs. Prepare decoction when necessary.

Action and uses :

Blood purifier antiinfective, antiperiodic, anthelmintic. Used in Malarial fevers with Seetamsu rasa, Mahaseetamsu rasa or Malinee vasantha rasa. In round worms and other worms infection it is given with Krimimudgara rasa. This is specially indicated in boils due to excessive heat and due to blood impurities. This is recommended to be given for 6 days continuously.

Dose :

25 to 50 ml. of decoction ; twice or thrice a day.

106. PANCHATIKTHA KWATHA CHOORNA
(Charaka Samhita : Jwara Chikitsa)

Drugs required * :

		part
1. Margosa bark	..	1
2. Tinospora	..	1
3. Jacquin's night shade	..	1
4. Wild snake gourd plant	..	1
5. Indian night shade root and stem	..	1

Preparation :

Make coarse powders. Prepare decoction when necessary.

Action and uses :

Antiperiodic, antiinfective, blood purifier. Used in fevers with Seetamsu rasa. In malarial fevers with Mahaseetamsu rasa. In chronic fevers with Swarna-malinee vasantha rasa. In skin disorders and Syphilitic ulcers and other chronic ulcers with Madhusnuhee rasayana or Amrithabhallataka lehya.

Dose :

25 to 50 ml. of decoction ; twice or thrice a day.

* Some people use—Chirata, Mollugo cerviana, Wild snake gourd, Picrorrhiza and Tinospora.

107. RASNADI KWATHA CHOORNA

(Sahasra Yoga : Kashaya Prakarana)

Drugs required :

	part
1. Lesser galangal ..	1
2. Castor roots ..	1
3. Bala (Sida) roots ..	1
4. Roots of nail dye plant ..	1
5. Asparagus roots ..	1
6. Climbing nettle roots ..	1
7. Adhatoda leaves ..	1
8. Round zedoary ..	1

	part
9. Tinospora ..	1
10. Himalayan cedar wood ..	1
11. Atis root ..	1
12. Nut grass tubers ..	1
13. Asteracantha longifolia roots ..	1
14. Dry ginger ..	1

Preparation :

Make coarse powders. Add sesame oil and ghee to the decoction before use.

Action and uses :

Antinfecive, antirheumatic. Used in all paralytic affections, arthritis, sciatica and neuritis and other inflammatory conditions with Vatagajankusa or Yogaraja guggulu.

Dose :

25 to 50 ml. of decoction ; twice or thrice a day.

108. SHADANGA KWATHA CHOORNA

(Ashtanga Hridya : Jwara Chikitsa)

Drugs required :

	part
1. Nut grass tubers ..	1
2. Sandalwood ..	1
3. Dry ginger ..	1
4. Black vetiver ..	1
5. Mollugo cerviana herb ..	1
6. Vetiver white ..	1

Preparation :

Dry the drugs, prepare coarse powders and mix. Prepare decoction when necessary.

Action and uses :

Used in fevers with thirst and burning sensation over the body. Also used to quench excessive thirst.

Dose :

25 to 50 ml. of decoction ; twice or thrice a day.

**109. TRIPHALADI KWATHA CHOORNA
(I.M.P.C.P.)**

Drugs required :

	part
1. Three myrobalans each (without seeds) ..	1
2. Bamboo leaves ..	1
3. Turmeric ..	1
4. False calumba stem (ceylon calumba) ..	1
5. Rose apple tree bark ..	1
6. Tanners' cassia flowers ..	1

Preparation :

Make into coarse powder and store. Take decoction when necessary.

Action and uses :

Mild laxative. Decreases the amount of urine in diabetes insipidus and used as a vehicle to other medicines in all kinds of urinary disorders.

Dose :

25 to 50 ml. of decoction thrice a day.

SECTION VIII

LEHYA

Concept and Terminology :

Lehya are linctuses or confections or thickened and sweetened extracts, equivalent to confections, electuaries and conserves of the British Pharmacopoeia. Lehya are also known as Avaleha.

Preparation :

Equipment required :

1. The drugs ennumerated in the recipe.
2. A wide mouthed stainless steel vessel or a similar vessel made of other metals, tinned inside.
3. Strong spatulae for mixing the medicine during preparation.
4. Fine sieve, or fine cloth.

(In factories preparing these medicines on a large scale, the heating is carried out by super heated steam jacketed vessels).

The mixing is done by electrically operated mixing machines. Sieving is done by mechanical sifters.

Process of Preparation :

The component drugs which enter into the composition of lehya are capable of being classified into the following :

1. The major drugs which are of prime import.



Processing of lehya in steam jacketed pan



2. The sweetening agents. These include sugar or sugar candy, jaggery and honey.
3. Ghee. This keeps the lehya soft and preserves it.
4. Flavoring agents.
5. The liquid media. These may either be infusions or juices or simply water.

The major drugs are finely powdered after drying and are sieved through a fine sieve or cloth. The sugar or sugar candy or jaggery is dissolved in the decoction, infusion or water and heated on mild fire in a wide mouthed container. The solution should be continuously stirred until the syrup reaches a stage which will form wiry extensions when pressed and drawn between the thumb and index finger. At this stage the drug powders are added and stirred well to mix the powder in the syrup. When the mixing is almost complete the vessel is removed from fire. (Violent heating or prolonged heating will result in a hard mixture). When the semi-solid mass is taken off the oven, ghee is mixed with it and made into a homogenous mixture. After the addition of ghee the mixture is left to cool and then noney is added to it. Finally the flavouring agents are added and mixed. The quality of the preparation depends upon the fineness of the drug powders and the efficient mixing of the ingredients at the correct stage during the process of preparation.

Storage :

Lehya should be stored in wide mouthed glass containers. The lehya are said to keep good for an year, without any change in quality.

110. AGASTYA RASAYANA
(Charaka Samhita : Kasa Chikitsa)

	gms
1. The ten roots (each) ..	100
2. Cowhage roots ..	100
3. Butterfly pea (white roots) ..	100
4. Round zedoary ..	100
5. Bala (sida) roots ..	100
6. Large long pepper ..	100
7. Prickly chaff flower root ..	100
8. Long pepper roots ..	100
9. Lead wort root ..	100
10. Beetle killer roots ..	100
11. Costus root ..	100
12. Barley ..	3000
13. Chebulic myroba'ans ..	100
14. Water (litres) ..	12+15
15. Jaggery ..	500
16. Ghee ..	200
17. Long pepper powder ..	200
18. Sesame oil ..	200
19. Honey ..	200

Preparation :

Take drugs 1 to 11, crush and boil to prepare a decoction reduced to $\frac{1}{2}$, with the chebulic myrobalans bundled and suspended in the boiling decoction. Prepare a decoction of Barley in 12 litres of water reducing to $\frac{1}{2}$. Filter the two decoctions and keep. Take the bundle of myrobalans, remove the seeds and retain the fruit flesh. Convert this flesh into a nice pulp. Mix the two decoctions, add the pulp and jaggery and boil to syrupy consistency. Then add to this syrup long pepper powder, ghee and sesame oil. When the mixture is moderately cool, add honey and mix thoroughly. Store in jars.

Action and uses :

Astringent, laxative. Useful in chronic bronchitis, asthma, bronchitis, colds and hiccup.

Dose :

6 gms. twice or thrice daily.

111. AMETHA BHALATAKA LEHYA

(Yoga ratnakara : Kushtadhikara)

Drugs required :

		gms.
1.	Purified marking nuts	3000
2.	Water (litres)	12.5
3.	Cow's milk (litres)	3.00
4.	Sugar	1500
5.	Three pungents (each)	12.00
6.	Three myrobalans (each)	12.00
7.	Camphor pure	12.00
8.	Nardus root	12.00
9.	Bamboo manna	12.00
10.	Black catechu	12.00
11.	Tinospora starch	12.00
12.	Sandal wood	12.00
13.	Cardamoms	12.00
14.	Long pepper	12.00
15.	Cloves	12.00
16.	Nut grass tubers	12.00
17.	Star anise fruits	12.00
18.	True kapok tree gum	12.00
19.	Cumin seeds	12.00

	gms.
20. Large long pepper	.. 12.00
21. Alligator yam	.. 12.00
22. Raw areca nut	.. 12.00
23. Nut grass larger	.. 12.00
24. Himalayan silver fir leaves	.. 12.00
25. Eagle wood	.. 12.00
26. Cuttle fish bone	.. 12.00
27. Calx of iron	.. 12.00
28. Turpith root	.. 12.00
29. Nut meg	.. 12.00
30. Bonduc nuts	.. 12.00
31. Mace	.. 12.00
32. Henbane seeds	.. 12.00
33. Ajowan seeds	.. 12.00
34. Cubbebs	.. 12.00
35. Pellitory	.. 12.00
36. Saffron	.. 12.00
37. Calx of mica	.. 12.00
38. Calx of tin	.. 12.00
39. Red oxide of mercury	.. 12.00
40. Black musale	.. 12.00

Preparation :

Boil the marking nuts in water and reduce the decoction to $\frac{1}{4}$. Add cow's milk and boil to $\frac{1}{4}$. Add sugar and prepare syrup. Add powders of 5 to 40, excepting 27, 36, 37, 38 and 39. Mix well cool the mixture and add the rest mixing to homogeneity.

Action and uses :

Blood purifier, and restorative. Used in all chronic skin diseases, leprosy and diabetes.

Dose :

6 to 12 gms. with warm milk. Twice or thrice a day.

112. ARDRAKHANDAVA LEHYA
(Vaidya Chintamani : Aruchi Prakarana)

Drugs required :

	gms.
1. Fresh ginger ..	800
2. Sugar ..	800
3. Black pepper powder ..	40
4. Long pepper powder ..	25
5. Long pepper root powder ..	25
6. Dry ginger ..	15
7. Nut meg ..	15
8. Cardamoms ..	15
9. Leadwort root ..	15
10. Bamboo manna ..	15
11. Ghee (about) (or sufficient quantity) ..	400
12. Honey (some quantity)	

Preparation :

Clean the ginger, cut into pieces, fry in some quantity of ghee and crush it. Take sugar and prepare a syrup by boiling it in water. Add ginger to the syrup. Add powders of 3 to 10 and prepare lehya. Cool and add sufficient quantity of honey and ghee to keep the lehya in good form.

Action and uses :

Digestive, carminative, appetiser. Useful in dyspepsia indigestion and other gastro-intestinal disorders.

Dose :

3 to 12 gms. Twice or thrice a day.

113. ASWAGANDHADI LEHYA
(I.M.P.C.P.)

Drugs required :

	gms
1. Withania roots powder ..	60
2. French honey suckle tubers powder ..	50
3. Indian sarsaparilla powder ..	50
4. Cumin seeds powder ..	50
5. Powder of China root ..	50
6. Raisins (seedless) ..	50
7. Cardamoms ..	10
8. Ghee ..	150
9. Honey ..	300
10. Sugar ..	600
11. Three pungents (each) ..	10

Preparation :

Prepare sugar syrup and add ghee to it. Then add powders of 1 to 7 and 11. Mix well. Allow to cool. Add honey and mix.

Action and uses :

Tonic, aphrodisiac, haematinic and blood purifier. Useful in wasting diseases, anaemia, impotency, blood impurities.

Dose :

6 to 12 gms. twice or thrice a day with warm milk.

114. SILVADI LEHYA
(Sahasrayoga ; Lehya Prakarana)

Drugs required :

	gms.
1. Bael roots ..	1500
2. Old jaggery ..	800
3. Water (litres) ..	12.5
4. Nut grass tubers ..	12
5. Coriander seeds ..	12
6. Cumin seeds ..	12
7. Cardamoms ..	12
8. Cinnamon bark ..	12
9. Nagakeshar stamens ..	12
10. Three pungents (each) ..	12

Preparation :

Crush Bael roots and boil in water, reducing the decoction to 4. Filter the decoction add jaggery and boil to consistency and add the powders of 4 to 10. Mix well to a semisolid mass.

Action and uses :

Astringent, digestive, and appetiser. Useful in diarrhoea, dysentery, dyspepsia and vomiting.

Dose :

6 to 12 gms. twice or thrice daily.

115. CHINCHADI LEHYA (Sahasrayoga : Lehya Prakarana)

Drugs required :

	gms.
1. Old jaggery	250
2. Old tamarind (seedless)	50
3. Calx of dross iron	500
4. Bael roots	100
5. Embelia fruit	100
6. Three pungents (each)	100
7. Cubebs	25
8. Cumin seeds	25
9. Nigella seeds	25
10. Three aromatics (each)	25
11. Liquorice	25
12. Lesser galangal	25
13. Nutmeg	25
14. Three myrobalans (each)	25
15. Mace	25
16. Honey (sufficient quantity)	
17. Water (about a litre)	

Preparation :

Heat old jaggery with water, prepare a syrup and add old Tamarind and calx of dross iron. Mix with it the powders of 4 to 15 and prepare lehya. When cooled add some honey to maintain the semisolid consistency.

Action and uses :

Appetiser, haematinic. Used in anaemia, jaundice, oedema, dyspepsia, loss of appetite and other digestive disorders.

Dose :

6 to 12 gms. twice or thrice a day.

116. CHYAVANA PRASHA LEHYA

(Charaka samhita, Chikithsa sthana : Rasayana pada)

Drugs required :

		gms.
1.	Large size, ripe fresh* emblic myrobalans (numbers)	500
2.	Ghee	600
3.	Sesame oil	600
4.	Sugar candy	2500
5.	Honey	300
6.	The ten roots (each)	50
7.	Sida roots	50
8.	Two wild grams (each)	50
9.	Long pepper	50
10.	Galls	50
11.	Phyllanthus niruri	50
12.	Raisins	50
13.	Leptadenia reticulata stem	50
14.	Falcate trumpet flower fruit	50
15.	Costus root	50
16.	Eagle wood	50
17.	Tinospora	50
18.	Chebulic myrobalans	50
19.	Round zedoary	50
20.	Nut grass tubers	50
21.	Spreading hog weed root (Punarnava)	50
22.	Cardamoms	50

* (When fresh fruits are not available, dry fruits could be used)

		gms.
23. Sandal wood	..	50
24. Water lily rhizome	..	50
25. Alligator yam	..	50
26. Adhatoda roots	..	50
27. Bamboo manna	..	200
28. Long pepper	..	100
29. Four aromatics each	..	50
30. Water	(litres) ..	12.5

Preparation :

Crush and boil drugs 6 to 26, in water and reduce to ½. When the decoction is being prepared, suspend a bag containing the emblic myrobalans into it so that its constituents are also extracted. Filter the decoction and mix with sugarcandy and prepare syrup. Meanwhile, crush the boiled emblic myrobalans and collect the flesh of the fruits discarding the seeds. Crush well and remove the fibrous material from this pulp by squeezing it through a coarse mesh. Fry this pulp with a mixture of ghee and sesame oil. Add this to the hot syrup and mix well. When the temperature has come down sufficiently, add to it the rest of the drugs (27 to 29) in a finely powdered state. Mix well and store.

Action and uses :

Mild expectorant. Used in pthisis, debility, coughs, bronchitis and asthma. In asthma it gives good relief and results when used with Swasananda gutika.

Dose :

6 to 12 gms. twice daily with hot milk

117. **DRAKSHADI RASAYANA** (I.M.P.C.F.)

Drugs required :

		gms.
1.	Cinnamon bark	50
2.	Cardamoms	50
3.	Leaves of cinnamon	50
4.	Nagakeshar stamens	50
5.	Three pungents (each)	50
6.	Nutmeg	50
7.	Mace	50
8.	Coriander seeds	50
9.	Sandal wood	50
10.	Sugar	9000
11.	Raisins	10000
12.	Saffron	50
13.	Ghee	1700

Preparation :

Make fine powders of 1 to 9 and keep. Prepare a syrup of sugar in water. Make a paste of raisins and saffron. Add the raisins—saffron paste to the syrup and mix with the addition of the drug powders. Add cow's ghee and prepare lehya.

Action and uses :

Restorative, haematinic, digestive and carminative. Useful in anaemia, coughs, bronchitis and debilitating diseases. Mildly laxative.

Dose :

6 to 12 gms. twice or thrice a day with hot milk.

118. GANDHAKA RASAYANA

(Sahasrayoga)

Drugs required :

	parts.
1. Jaggery	.. 100
2. Ghee	.. 15
3. Three pungents (each)	.. 1½
4. Embelia fruits	.. 1
5. Cinnamon bark	.. 1
6. Cinnamon leaves	.. 1
7. Cardamoms	.. 1
8. Three myrobalans (each)	.. 1
9. Lesser galangal	.. 1
10. Psoralea seeds	.. 1
11. Eclipta herb	.. 1
12. Castor seed kernels	.. 50
13. Sulphur purified	.. 18
14. Calx of Iron	.. 1
15. Honey	. 7½

Preparation :

With some quantity of water, prepare syrup of Jaggery and add the ghee and powders of 3 to 11, and add a paste of 12 and mix to homogeneity. Allow to cool. Then add powdered sulphur, calx of iron and honey and mix well.

Action and uses :

Blood purifier. Given in cases of leprosy, chronic ulcers, eczema, boils and other chronic skin diseases.

Dose :

2 to 5 gms. Once a day.

119. GUDA PIPPALI

(Bhaishajyaratnavali : Pleehayakrit Adhikara)

Drugs required :	part
1. Embelia fruits	.. 1
2. Three pungents (each)	.. 1
3. Costus root	.. 1
4. Asafoetida	.. 1
5. Five salts (each)	.. 1
6. Three alkalies (each)	.. 1
7. Cuttle fish bone	.. 1
8. Lead wort root	.. 1
9. Large long pepper	.. 1
10. Nigella seeds	.. 1
11. Ash of palmyrah flowers	.. 1
12. Ash of pumpkin stalks (ash gourd)	.. 1
13. Ash of prickly chaff flower plant	.. 1
14. Ash of tamarind bark	.. 1
15. Long pepper powder	.. 22
16. Old jaggery	.. 88

Preparation :

Put the jaggery in large mortar and add all the other drugs in powdered form. Grind and mix well with a pestle to a semi solid mass, of uniform texture. (Usually, it is the convention to make a jaggery syrup and add the drug powders and make lehya).

Action and uses :

Digestive, Carminative and antitoxic. Used in the treatment of enlarged liver and spleen, ascitis, gastric and intestinal disorders, flatulance, indigestion and dyspepsia.

Dose :

6 to 12 gms. twice a day.

120. HINGUTRIGUNA LEHYA (I.M.P.C.P.)

Drugs required :

1. The soft paste of the drugs left behind after the preparation of Hingu Triguna taila is taken as Hingutriguna lehya.

Action and uses :

Appetiser, digestive and laxative. Useful in gastro intestinal disorders, flatulance, dyspepsia and also as a laxative. It is used with cow's milk or buttermilk.

Dose :

6 to 12 gms. twice a day.

121. JEERAKADHI RASAYANA (I.M.P.C.P.)

Drugs required :

	gms.
1. Cumin seeds	750
2. Lodh tree bark	225
3. Four aromatics (each)	5
4. Dry ginger	5
5. Long pepper	5
6. Nut grass tubers	5
7. Vetiver	5
8. Coriander	5
9. Turmeric	5
10. Bamboo manna	5
11. Arrow root starch	5

	kgs.
12. Sugar	.. 2.500
13. Honey	.. 0.680
14. Ghee	.. 0.500

Preparation :

Prepare syrup of sugar and add fine powders of 1 to 11. Add No. 14 and mix well. When cool add 13.

Action and uses :

Uterine tonic, digestive and carminative. Used in the treatment of uterine disorders like menorrhagia, metrorrhagia, leucorrhoea and dysmenorrhoea.

Dose :

6 to 12 gms. twice or thrice a day.

122. KOOSHMANDA LEHYA

(Bhaishajyaratnavali : Raktapiktha Adhikara)

Drugs required and preparation :

1. Take fully grown ash gourd fruits, remove the green skin and the placenta and cut into small pieces. Take 5000 gms. of pieces press to obtain juice and keep separately. Filter the juice and keep. Fry the extracted pieces of ash gourd in 800 gms. of ghee till the pieces attain an yellow brown colour. Prepare syrup of sugar (7) using juice of ash gourd. Add powders of 2 to 6.

		gms.
2. Long pepper	..	100
3. Dry ginger	..	100
4. Cumin seeds	..	100
5. Four aromatics (each)	..	25
6. Coriander	..	25
7. Sugar	..	5000
8. Honey	..	400

Add the fried pieces of ash gourd and 400 gm. of honey, and mix thoroughly.

Action and uses :

Digestive, appetiser carminative, restorative, haematinic, haemostatic, sedative and expectorant. Used in emaciating diseases and piles. It is given with calx of gold or silver or Poornachandrodaya or Makaradwaja when good tonic action is required. It is a good aphrodisiac when given with powders of salep, almonds, pistachio nut, wall nut, water chestnut and seeds of *astracantha longifolia*.

Dose :

6 to 12 gms. with milk twice or thrice daily.

123. KUTAJA PHANITA

(Ashtangahridaya : Ateesara Chikitsa)

Drugs required :

		gms.
1. Tellicherry bark	..	312.5
2. Water	(litres) ..	5
3. Old jaggery	..	700

		gms.
4.	Tellicherry seeds	10
5.	Bow string hemp rhizome	10
6.	Beetle killer roots	10
7.	Picrorrhiza	10
8.	Black pepper	10
9.	Atis roots	10
10.	Square spurge stem	10
11.	Cardamoms	10
12.	False pareira brava	10
13.	Fennel seeds	10
14.	Indian trumpet flower root	10
15.	Common emetic nut	10
16.	Ajowan seeds	10
17.	White mustard	10
18.	Sweet flag	10
19.	Cumin seeds	10
20.	Asafoetida, fried	10
21.	Embelia fruits	10
22.	Long pepper	10
23.	Long pepper roots	10
24.	Black pepper root	10
25.	Lead wort root	10
26.	Dry ginger	10
27.	Nut-meg	10
28.	Liquorice root	10
29.	Touch me not plant (<i>Mimosa pudica</i>)	10
30.	Butea seeds	10
31.	Climbing neetle root	10
32.	Lodh tree bark	10
33.	Fire flame flowers	10
34.	Bael fruit pulp—dry	10
35.	Lotus stamens	10
36.	Honey	25

Preparation :

Boil Tellicherry bark in water and reduce the decoction to $\frac{1}{4}$. Using this decoction and old jaggery prepare a syrup. When the syrup has come to the consistency add powders of other drugs and honey. Mix and prepare lehya.

Action and uses :

Astringent. Used in diarrhoea, dysentery, haemorrhoids and other enteric ailments such as peptic ulcers

Dose :

6 to 12 gms. twice or thrice daily.

124. MADHUSNUHEE RASAYANA
(I.M.P.C.P.)

Drugs required :

	gms.
1. Sugar ..	540
2. Water (small quantity for syrup making)	
3. Purified bdellium ..	20
4. Ghee ..	400
5. Tinospora root ..	10
6. Spreading hog weed root ..	10
7. Three myrobalans (each) ..	10
8. Three pungents (each) ..	10
9. Cardamoms ..	10
10. Cinnamon bark ..	10
11. Cinnamon leaves ..	10
12. Cumin seeds ..	10
13. Rock salt ..	10
14. Embellia fruits ..	10

	gms.
15. Lesser galangal ..	10
16. Beetle killer roots ..	10
17. Black pepper root ..	10
18. Long pepper root ..	10
19. Coriander seed ..	10
20. Fennel seeds ..	10
21. Nigella seed ..	10
22. Nardus root ..	10
23. Costus root ..	10
24. Lead wort root ..	10
25. Indian sarsaparilla root ..	10
26. Black musale ..	10
27. Withania root ..	10
28. China root ..	10
29. Purified sulfur ..	10
30. Honey ..	200

Preparation :

Prepare sugar syrup. Add paste of bdellium and ghee and mix well. Add to this, the powders of all the other drugs except sulfur and honey and mix. Allow to cool and add sulfur and honey and mix to homogeneity and store.

Action and uses :

Blood purifier, antiinfective. Used in arthritis, chronic ulcers, chronic skin diseases, fistula and scrofula. Also used in scaly skin conditions and fissured skin and soles. When under treatment with this medicine sour, spicy, pungent and oily foods are avoided. Considered to be of much value in leprotic affections of the skin, and syphilitic symptoms.

Dose :

3 to 12 gms. twice or thrice a day.

125. MANIBHADRA LEHYA
(Ashtangahridaya : Kushta Chikitsa)

Drugs required :	parts
1. Old jaggery	.. 12
2. Embelia fruits	.. 1
3. Chebulic myrobalan	.. 1
4. Emblic myrobalan	.. 1
5. Turpith root—black	.. 3
6. Water (some quantity for preparing syrup of jaggery)	

Preparation .

Prepare jaggery syrup, add powders of 2 to 5 and prepare lehya.

Action and uses :

Laxative, anthelmintic and blood purifier. Useful in piles, intestinal worms, chronic skin diseases and habitual constipation.

Dose :

6 to 12 gms. twice a day or at bed time.

126. SATHAVAREE LEHYA
(Sahasra yoga : Lehya prakarana)

Drugs required :

1. Asparagus root juice	(litres) ..	3
2. Jaggery	..	gms. 3000
3. Powder of dry ginger	..	12
4. Powder of cardamoms	..	12
5. Powder of black musale	..	12

	gms.
6. Powder of false pareira brava ..	12
7. Powder of small caltrops roots ..	12
8. Powder of two sarsaparillas (each) ..	12
9. Powder of negundo roots ..	12
10. Powder of phyllanthus niruri ..	12
11. Powder of french honey suckle tubres ..	12
12. Powder of long pepper ..	12
13. Powder of liquorice ..	12
14. Powder of purified asphalt ..	12
15. Bamboo manna ..	200
16. Sugar ..	200
17. Ghee ..	800

Preparation :

Prepare syrup of a mixture of 1 and 2. Add the fine powders of 3 to 13. Prepare lehya by adding to this 14 to 17 grind. Keep for a week and then use.

Action and uses :

Restorative and tonic, haematinic, choalagogue and vitaliser. Used in emaciating diseases, menorrhagia haemoptysis and jaundice. Useful in urinary disorders ; diuretic.

Dose :

3 to 12 gms. twice or thrice daily.

127. SOWBHAGYA SUNTI

(Bhaishajya ratnavali : Sthree rogadhikara)

Drugs required :	gms.
1. Jaggery ..	4500
2. Ghee ..	500

	gms.
3. Dill seeds ..	200
4. Dry ginger ..	320
5. Coriander seeds ..	120
6. Embelia fruits ..	40
7. Nigella seeds ..	40
8. Cumin seeds ..	40
9. Long pepper ..	40
10. Nagakeshar stamens ..	40
11. Cinnamon leaves ..	40
12. Black pepper ..	40
13. Cardamoms ..	40
14. Cinnamon bark ..	40
15. Nut grass tubers ..	40

Preparation :

Powder dill seeds finely and keep. Similarly powder dry ginger. Prepare syrup of jaggery and add ginger powder and mix. When it attains a plastic consistency add the powder of dill seeds. Keep ready a mixed powder of all the other drugs (except No. 2) and mix at this stage with the aforesaid mixture until a homogenous mass results. Finally add ghee (No. 2) and mix well.

Action and uses :

Digestive, carminative and astringent. Uterine tonic and hence used in the treatment of uterine disorders especially after delivery.

Dose :

6 to 12 gms. Preferably with goat's milk. Given twice daily.

128. VASAKANTAKARI LEHYA
(I.M.P.C.P.)

Drugs required :

	gms.
1. Adhatoda plant ..	5000
2. Jacquin's night shade ..	5000
3. Water (litres) ..	100
4. Jaggery (sugar is used usually) ..	4000
5. Three pungents (each) ..	50
6. Lesser galangal ..	50
7. Tinospora starch ..	50
8. Lead wort root ..	50
9. Galls ..	50
10. Beetle killer roots ..	50
11. Nut grass tubers ..	50
12. Long pepper root ..	50
13. Climbing nettle root ..	50
14. Ghee ..	400
15. Long pepper ..	400
16. Honey ..	400
17. Bamboo manna ..	400

Preparation :

Cut and crush the first two drugs. Boil them in water and reduce decoction to $\frac{1}{4}$. Filter the decoction and boil with jaggery to prepare syrup. Then add to the syrup, the powders of 5 to 13. Mix well and add ghee. Then add fine powders of bamboo manna and long pepper and honey. Mix thoroughly and store.

Action and uses :

Sedative, appetiser, expectorant, digestive and carminative. Used in coughs, bronchitis, indigestion, dyspepsia, and liver and spleen enlargements

Dose :

5 to 10 gms. Twice daily.

SECTION IX

L E P A

Concept and Terminology :

Lepa are pastes or plasters intended for external use only, and could be equated with the 'ointments' of the western pharmacopoeias. They should never be brought into contact with the delicate tissues as the ingredients are poisonous and irritating or corrosive. The term 'lepa' itself means that it is for external application only.

Preparation :

Equipment required :

1. The necessary drugs.
2. Mortar and pestle.
3. A wide mouthed vessel for heating the wax and oil.
4. Spatulae for mixing the drugs and wax-oil mixture.

(In large scale preparation, electrically operated grinders, roller mills and mixers are used for making the powders and for mixing ointments.

Process of Preparation :

The lepa generally contain bee's wax and/or some vegetable oil which give the paste like consistency. All the ingredients should be finely powdered prior to mixing with the waxy base. When realger and/or yellow orpiment are to be added to the preparation they

are powdered separately and then added. When the preparations contain mercury and sulfur they are ground together to homogeneity and then added to the other ingredients. Preparations which take into composition both wax and oil, have the oil heated first and wax melted into it and then powdered drugs added. The molten mixture of oil and wax are filtered before the drug powders are mixed with it. **The powders should not be mixed with molten wax oil mixture when it is hot.** Mixing should be carried out until the drug particles are evenly distributed in the waxy base.

Storage and Use :

Lepa are stored in wide mouthed glass containers or in tins. All the lepa are meant for only external use and under no circumstances should be taken internally as some of them are poisonous.

— — —

129. AVALGUJADI LEPA (I.M.P.C.P.)

Drugs required :

	parts
1. Psoralea seeds—powdered ..	2
2. Chalmogra seeds—powdered ..	2
3. Tanners cassia leaves—powdered ..	2
4. Turmeric powder ..	1
5. Yellow orpiment (lumps) ..	1

Preparation :

Grind all drugs except No. 2. Powder No. 2 separately. Mix the powders and store. Mix with cow's

urine when used (sesame oil or coconut oil could also be used)

Action and uses :

Healing ; eliminates microbial infection of wounds. Serves as an antibacterial agent when applied to ulcers etc. and accelerates healing.

In itches—it is rubbed with sesame oil and applied. In fissured skin—it is used with coconut oil. In eczema—it is used with a decoction of bastard teak flowers. In conditions like leucoderma—it is used with a decoction of Psoralea seeds.

130. CHANDRA KALA LEPA
(I.M.P.C.P.)

Drugs required :

	parts
1. Bees wax	2
2. Powdered white pepper	1
3. Coconut oil	8
4. Camphor	2

Preparation :

Dissolve bees wax in hot coconut oil. Add the powders one by one and grind well into a very fine paste.

Action and uses :

Relieves headache. Removes pains in the joints. Meant for external application only.

131. KUMKUMADI LEPA (I.M.P.C.P.)

Drugs required :

	gms.
1. Turmeric	5
2. Lodh tree bark	5
3. Chebulic myrobalan	5
4. Black vetiver	5
5. Nut grass tubers	5
6. Indian Madder	10
7. Lesser galangal	5
8. Vetiver	5
9. Belleric myrobalan	5
10. Fragrant screwpine/flower	5
11. Sesame oil	160
12. Water	640
13. Saffron	1
14. Mercuric sulfide	2.5
15. Rock salt	5
16. Camphor pure	8
17. Bezoar	1
18. Musk	1/16
19. Sandal wood oil	10
20. Otto of roses	1
21. Bees wax	40

Preparation :

Put drugs 1 to 10 in 11 and heat until it begins to boil. Stop heating. Add water and heat a little. Set aside for 10 days tightly closed. Then recover the oil. Add it to heated bees wax which has been gently heated to melt. Keep to cool. Finely powder the drugs 13 to 18. Mix it with the bees wax and grind adding 19 and 20. When a soft nice paste is obtained, store.

Action and uses :

Useful in acne and allied facial diseases. A regular use promotes a glossy complexion to the face. External use only. Could be used with benefit after shaves.

132. RASOTHAMADI LEPA
(I.M.P.C.P.)

Drugs required :

	part
1. Mercury	1
2. Sulfur	1
3. Red orpiment	1
4. Red lead	1
5. Cumin seeds	1
6. Nigella seeds	1
7. Black pepper	1
8. Turmeric powder	1
9. False calumba stem—powder	1

Preparation :

Grind 1 & 2 into a powder. Grind separately No. 3 and similarly No. 4. Grind the remaining drugs into a fine powder. Mix all these powders and grind again into a very fine powder.

Action and uses :

Applied to chronic ulcers, itches, eczema, and other dermal disorders.

133. RASAKARPOORA LEPA
(I.M.P.C.P.)

Drugs required :

		parts
1. Calomel	..	1
2. Red lead	..	2
3. Litharge	..	2
4. Bee's wax	..	40
5. Coconut oil	(litres) ..	10

Preparation :

Heat coconut oil and dissolve the wax in it. When cool, add fine powders of the drugs 1, 2 and 3 and grind into a very fine paste. Store in bottles.

Action and uses :

External application heals foul ulcers and wounds. Useful also in eczematous eruptions and itches. Applied after washing the affected regions. May be mixed with sesame oil and used.

134. SINDOORADI LEPA.
(I.M.P.C.P.)

Drugs required :

		parts
1. Red lead	..	2
2. Cinnabar	..	1
3. Calomel	..	1
4. Litharge	..	2
5. Bees wax	..	10
6. Coconut oil	..	40

Preparation :

Heat coconut oil and dissolve wax in it. Powder the rest of the drugs and mix with the wax base when cool. Grind the mixture well until a nice paste is obtained.

Action and uses :

Applied to itches, fissured skin, eczema and syphilitic ulcers. Meant for external application only.

135. SURADARU LEPA
(I.M.P.C.P.)

Drugs required :

	parts
1. Powder of Himalayan cedar wood ..	1
2. Powder of Dry ginger ..	1
3. Powder of Sal ammoniac ..	1

Preparation :

Mix and grind the drugs into a fine powder and store. Mix with butter milk, lemon juice or hot water when required for use.

Action and uses :

Counter irritant. Anti inflammatory. Used as poultice on inflammatory swellings. It either resolves or suppresses the swellings. Intended for external application only.

136. TUVARAKA LEPA
(I.M.P.C.P.)

Drugs required :

1. Chalmogra seeds (some quantity)
2. Coconut oil (sufficient quantity)

Preparation :

Take the kernal from the seeds and grind with coconut oil into a soft fine paste.

Usually just a paste of Chalmogra seeds is taken as Tuvaraka lepa

Action and uses :

Applied to itch, eczema, fissured skin, leucoderma and other lepromatous affections of the skin. In leucoderma, it is mixed with a paste of Psoralea seeds and applied.

SECTION X

ANJANA

Concept and Terminology :

Anjana are medicines that are applied to the eyes (Colirium) and may be in the form of sticks, thick liquids (Semi solids) or thin liquids. The anjana in these three forms are termed as varti, rasakriya and drava respectively. The varti type of anjana are rubbed in water or other prescribed media and then applied to the eyes.

Preparation :

Equipment required :

1. The necessary drugs.
2. Fans for heating and dehydrating the compounds like copper sulfate or common alum.
3. Mortar and pestle for the preparation of the paste or powder as the case may be.
4. Sieve for sieving the powders. A fine cloth of close mesh may very well be used.
5. Vessels for preparing and keeping the decoction or juices.
6. Dishes for drying the varti type of anjana. Enamelled iron trays are much used for drying.
7. Spoons or spatulae for mixing the preparation.

Process of Preparation :

The very important points that should be borne in mind are the selection of pure water for the preparation, which should be preferably distilled water, and the grinding of the drugs which should result in as fine a powder or paste as possible.

When copper and iron are to be used in the preparation, the metals are used in a calcined (bhasma) state. When copper sulfate or common alun is to be used, they are taken in an anhydrous state. Anhydrous copper sulfate or common alun is obtained by heating the solid (crystals) form on a pan and removing the water of crystallization contained in it. The material ultimately becomes an amorphous powder.

If red orpiment or yellow orpiment is to be used, they should be purified according to the traditional method and then included in the composition. Vegetable drugs like dry ginger should be powdered finely and sieved through a fine cloth of minute mesh before it is mixed to other drugs. Fluid media used in these preparations are often juices, decoctions or coconut water. If so such media are prescribed in the formula, pure water is used.

The varti should be dried under protection to prevent dust or grit falling on it.

Storage :

The anjana in the form of sticks (varti) should be stored in wide mouthed glass bottles with dust proof stoppers. Those that are viscous or aqueous are stored in amber or blue bottles with a dropping stopper. Semi solid anjana are stored in wide mouthed glass bottles.

137. CHANDRODAYAVARTHI
(Bhaishajyaratnavali : Netrarogadhikara)

Drugs required :

	part
1. Kernel of chebulic myrobalans ..	1
2. Kernel of belleric myrobalans ..	1
3. Sweet flag ..	1
4. Costus root ..	1
5. Long pepper ..	1
6. Black pepper ..	1
7. Purified red orpiment ..	1
8. Inner spiral of conch shell ..	1
9. Goat's milk (sufficient quantity)	

Preparation :

First, powder the conch spiral finely and then add to red orpiment. Grind the mixture with goats milk to make a homogenous paste. Then add the other drugs in powder form and continue grinding with the addition of goat's milk little by little. Grind atleast for three days. Roli into small pencils or sticks and dry in shade, protecting from dust and grit falling on them

Action and uses :

The sticks are rubbed in honey and used as an eye ointment in the eye diseases like conjunctivitis, trachoma, keratitis and corneal ulcers.

138. NARI KELANJANA

(Arogya kalpadruma : Netra roga chikitsa)

Drugs required :

		gms.
1.	False calumba stem ..	600
2.	Three myrobalans (each without seed) ..	600
3.	Liquorice ..	600
4.	Picrorrhiza ..	12.5
5.	Tender coconut water (litres) ..	48
6.	Camphor ..	10
7.	Rock salt ..	10
8.	Honey ..	1000

Preparation :

Crush 1 to 4 and boil with 5 until the decoction is reduced to $\frac{1}{3}$ of the volume of coconut water. Strain, filter and heat until a paste results. Cool it and add 6 and 7 and grind to very fine texture. Add honey and mix well to uniform consistency store.

Action and uses :

Used as eye drops in conjunctivitis, both acute and chronic. Useful also in blepharitis and inflammation of the eyes.

139. SIDDHA NAGARJUNA VARTI*
(Bhaishajya ratnavali: Netra rogadhikara)

Drugs required :

	part
1. Three myrobalans (Kernals only) (each) ..	1
2. Three pungents (each) ..	1
3. Rock salt ..	1
4. Liquorice ..	1
5. Copper sulfate ..	1
6. Berberis extract (or false calumba extract) ..	1
7. Rhizome of white lotus ..	1
8. Embelia fruits ..	1
9. Lodh tree bark ..	1
10. Calx of copper ..	1
11. Curd (sufficient quantity to submerse the copper sulfate)	

Preparation :

Keep copper sulfate in curd for 12 hours then fry on a pan. Powder all the other drugs separately into very fine powders. Grind the fried copper sulfate in a mortar and add calx of copper and berberies extract little by little and continue grinding. When the mixture is complete add rock salt and three myrobalans powder and grind. Then add the other powders and distilled water to make a fine paste. Roll into small sticks and dry under shade. Store in glass bottles.

Action and uses :

Rub with some human breast milk into a paste and apply to the eyes in blepharitis, conjunctivitis, corneal diseases and poor eye sight. Useful also in inflammation of the eyes. Rubbed with the juice of Bastard teak flowers it is used in corneal ulcers and opacities. In poor eye sight, to improve vision it is rubbed with Lodh tree bark and applied to the eyes.

SECTION XI

PANAKA

Concept and Terminology :

Panaka are syrups of medicinal value.

Preparation :

Equipment required :

1. The drugs enumerated in the recipe.
2. A wide mouthed vessel (made of stainless steel or made of other metal and tinned inside.). The vessel should have a capacity two times the volume of the fluids taken. If small, the chances of overflowing of the syrup during boiling are more.
3. A laddle.
4. A spatula.

Process of Preparation :

The sugar is completely dissolved in the medium prescribed, which may either be some decoction, or juice. This fluid medium is usually equal to the amount of sugar by weight. The solution is poured into the wide mouthed vessel made of stainless steel or made of other metals and tinned inside, and is placed on the oven and heated. Heating should be slow and steady with continuous stirring. Over heating will result in overflowing and in a very sticky syrup. When the syrup reaches the consistency of honey, it is removed from the oven and cooled and transferred to bottles. The scum is separated from the syrup by the addition of a little lime juice to the boiling syrup and it is removed with a laddle.

Storage :

Panaka should be stored in glass bottles with good screw type caps or stoppers because their sweet taste attracts insects.

140. JAMBEERADI PANAKA
(I.M.P.C.P.)

Drugs required :

	parts by weight
1. Fresh filtered lime juice	.. 2
2. Juice from fresh ginger	.. 1
3. Sugar	.. 2

Preparation :

Mix 1, 2 and 3 and prepare syrup. Cool, filter and store.

Action and uses :

Digestive, carminative and appetiser. Useful in dyspepsia, indigestion, burning sensation in the chest, nausea and vomiting. It promotes the feeling of taste (Anorexia).

Dose :

8 to 15 ml. with or without water half-an-hour before food. Two or three times a day.

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Panaka are syrups of medicinal value.

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Equipment required :

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Storage :

Panaka should be stored in glass bottles with good screw type caps or stoppers because their sweet taste attracts insects.

140. **JAMBEERADI PANAKA**
(I.M.P.C.P.)

Drugs required :

	parts by weight
1. Fresh filtered lime juice	.. 2
2. Juice from fresh ginger	.. 1
3. Sugar	.. 2

Preparation :

Mix 1, 2 and 3 and prepare syrup. Cool, filter and store.

Action and uses :

Digestive, carminative and appetiser. Useful in dyspepsia, indigestion, burning sensation in the chest, nausea and vomiting. It promotes the feeling of taste (Anorexia).

Dose :

8 to 15 ml. with or without water half-an-hour before food. Two or three times a day.

141. MATULUNGA RASAYANA (I.M.P.C.P.)

Drugs required :

		ml.
1.	Juice of fresh citron fruits	500
2.	Fresh juice of lime fruits	500
3.	Fresh juice of ginger	125
		gms.
4.	Rock salt	50
5.	Sugar	1250

Preparation :

Mix 1, 2 and 3 and 5. Prepare syrup and add powdered rock salt just before removing from the oven.

Action and uses :

Useful in indigestion, excessive salivation, and anorexia. Useful also in nausea, vomiting and morning sickness.

Dose :

1 to 2 tea spoonful. Twice or thrice a day with or without water.

SECTION XII

S A T W A

Concept and Terminology :

Satwa are sedimented extracts of drugs which are predominantly starchy in nature. The most common type of satwa or starch is the Gudoochi satwa which is the starch of tinospora.

Preparation :

Equipment required :

1. The drug from which the starch is to be prepared.
2. Two large wide mouthed vessels.
3. A length of thin rubber tubing.
4. A very fine sieve.

Process of preparation :

The drug is nicely crushed and soaked in water. It should not be ground or powdered. After soaking the drug it is churned or repeatedly squeezed and washed in the water without changing the water. When the drug has lost all its mucilagenous properties by washing, the fibrous material and other coarse materials are removed. Then the water is kept undisturbed over night to allow the particles of starch to settle down. The next morning the water is carefully siphoned off without disturbing the sedimented starch. The starch is then washed in a little amount of water and recovered by settling down.

Storage :

The wet starch is dried completely and packed in damp proof packets of polythene or tubes of glass or plastic.

142. GUDOOCHEE SATWA
(I.M.P.C.P.)

Drugs required :

1 Well grown thick stems and roots of *Tinospora* (moon-creeper).

Preparation :

Remove the thin papery bark. Cut into pieces, crush in a stone mortar. Put the crushed drug in a large vessel and pour water and stir well. Remove from the water the coarse and fibrous part of the drug and crush again. Wash it in the same water in the vessel. Repeat collecting crushing and washing the fibrous material. Keep the water in the vessel until sedimentation occurs. Decant the clear supernatant water and collect the sedimented starch. Add some more water to this and remove if anymore sediment of fibrous material is mixed with the starch. Allow the starch to settle and carefully decant the water and collect the starch. Expose to sun and dry. (Usually the washings are concentrated by evaporation and mixed with satwa. Then it is bitter).

Action and uses :

Tonic, vitalizer. Useful in wasting diseases, pthisis, diabetis and chronic fevers. In polyuria it is given with *Tarakeswara Rasa*.

Dose :

$\frac{1}{2}$ to 1 gm. twice or thrice daily with suitable adjuvants.

SECTION XIII

T H A I L A

Concept and Terminology :

Thaila are medicated oils. They are similar to ghrita, but are prepared with oils instead of ghee. Thaila in sanskrit means 'Oil'. The term thaila is derived from the word 'Tila' which refers to the sesame seeds. Usually in the preparation of thaila, sesame oil is used excepting in a few preparations where coconut oil or castor oil or neem oil are used.

Preparation :

The desirable properties of the drugs are imparted to the oils by a process of boiling the drugs or their juices or decoctions with the oils. So, the resultant medicine has the properties of the drugs with which it was treated. The final product does not simulate the oil used either in its colour or flavour.

Just as in the case of the ghrita, the preparation of thaila involves the usage of an aqueous medium, an oil and a paste. The aqueous medium may either be, decoctions of drugs or juices expelled from fresh and green drugs or milk or water or cow's urine in some cases. The volume of the aqueous medium in a given preparation is four times the volume of oil taken for that preparation.

The oil used is predominantly sesame oil which is called as gingelly oil or til oil in the Indian market. However, in some preparations, other oils are being used and these are specified in the recipe. When the type of

oil to be used is not definitely mentioned in the recipe. Sesame oil should be taken for use. This is, $\frac{1}{4}$ th of the volume of the aqueous media taken and 4 times the volume of the paste. The sesame oil should be unadulterated. It is fairly common to see sesame oil adulterated with Peanut oil in the market. So, to be on the safer side, the required amount of sesame seeds are purchased and oil is expelled from it.

The paste is prepared by finely grinding the prescribed drugs in a mortar. Some people use large amounts of water for grinding, finally filter the ground product and use the filtered liquid in place of paste. However this is not the practice with most of the physicians, probably due to the fact that more of active principles will be extracted when the complete drug is treated with oil, as compared to a cold aqueous extract.

Equipments and materials required :

1. The drugs enumerated in the recipe, made ready for use.
2. A wide mouthed vessel made of brass or copper with a tinned internal surface. Stainless steel vessels are excellent and work to be cheaper in the long run as the expenditure on tinning and laborious cleaning is cut down. It should be sufficiently large to provide room for the rising oil during the process of boiling.
3. Strong spatulae with long handles for stirring and mixing the material during preparation.
4. Laddles for transferring the oil from the container.
5. A clean cloth for filtering.
6. Mortar and pestle.

Method of preparation :

The aqueous media, the oil and the paste are put into the vessel, mixed and heated on moderate fire. After some time the mixture begins to boil, giving off water vapour. This may cause the oil to rise up violently and overflow, into the oven contributing to more fire. The preparation will become charred and a carbonised aroma will be created in the medicine which is not removeable. Intense heating causes in short, reduced yield of medicine and that too a substandard one. The mixture should be continuously stirred all the time. As the amount of water present in the boiling mixture is reduced, there is a concomitant reduction in the boiling sound. Synchronous with the loss of water is a sedimentation of the drug particles at the bottom of the vessel. When complete dehydration is effected, either the fire is removed or the vessel is taken off the oven.

To ascertain whether complete dehydration has been effected, a little of the sediment is taken, rolled into a ball and ignited. A steady and silent flame indicates absence of water and a flickery flame with jittering noise indicates the presence of water.

The stage at which the mixture has just lost all the water, is called the Madhya paka which we shall call as the medium stage. When there are still traces of water it is called Mridu paka which we shall call the soft stage. The Hard stage or Kharapaka is the stage when the totally dehydrated sediment is fried in the oil and becomes coarse in texture. The medicine should be taken off the oven during the correct stages prescribed in the recipe. If no particular stage is mentioned it is usually taken at the medium stage.

Collection of Thaila :

The thaila could be collected when completely cooled, because it does not solidify under ordinary room temperatures. It may either be decanted or taken with a laddle. The sedimented material is also taken and squeezed through a cloth to recover all the thaila soaked in it.

When thaila are prepared, they should be stored for seven days before being used. In some cases where the recipe directs the addition of some more drugs after the separation of the oil from the sediment, the drug powders are mixed in the oil and kept for the prescribed period of time to impart their qualities to the oil. Usually these drugs impart some colour and sweet aroma to the oil.

Usage :

Most of the oils or thaila are intended for external application only, barring a few like Kshcerabala thaila capsule and Balaswagandhadi thaila which are used internally. Medicated oils are powerful stimulants and counter irritants or cooling and sedative. They are quick in action and have a nourishing and stimulant effect on the patient. When a massage is done with oil, the rubbing should be along the direction of the body hairs and should be followed by fomentation or warm protection of the massaged part.

Storage :

Thaila are stored in narrow mouthed glass bottles with relevant labels to distinguish which are meant for internal use and which are meant for external use only.

143. AMAVATA THAILA
(Sahasrayoga : Taila Prakarana)

Drugs required :

	gms.
1. Fresh juice of tamarind leaves ..	1800
2. Supernatant fluid of curd (whey) ..	1800
3. Sesame oil ..	900
4. Costus root ..	12.5
5. Dry ginger ..	12.5
6. Sweet flag ..	12.5
7. Drum stick tree bark ..	12.5
8. Garlic ..	12.5
9. Himalayan cedar wood ..	12.5
10. White mustard ..	12.5
11. Lesser galangal ..	12.5
12. Ceylon caper root ..	12.5

Preparation :

Prepare soft paste of drugs 4 to 12. Prepare taila with 1, 2, 3 and this paste, until hard stage.

Action and uses :

Counterirritant, antiinflammatory, relieves pain. Used in pains of joints and inflammatory swellings. Hot fomentation after the application of the oil should be given. External use only.

144. ANU THAILA

(Ashtanga Hridaya : Sutrasthana Nasyavidhi)

Drugs required :

		gms.
1.	Roots of leptadenia	12
2.	Black vetiver	12
3.	Himalayan cedar wood	12
4.	Nut grass tubers	12
5.	Cinnamon bark	12
6.	Vetiver	12
7.	Indian sarsaparilla	12
8.	Red sanders wood	12
9.	False columba stems (ceylon calumba)	12
10.	Liquorice	12
11.	Nut grass tubers—larger	12
12.	Eagle wood	12
13.	Asparagus roots	12
14.	Lotus stamens	12
15.	Bael roots	12
16.	Water lily flowers or rhizome	12
17.	Indian night shade root	12
18.	Jacquin's night shade root	12
19.	Jasmine roots	12
20.	Unifoliate tick trefoil root	12
21.	Sweet smelling hare foot root	12
22.	Embelia fruits	12
23.	Costus root	12
24.	Cardamoms	12
25.	Piper aurantiacus fruits	12
26.	Stamens of white lotus	12
27.	Beleric myrobalan	12
28.	Emblic myrobalan	12
29.	Goat's milk	(ml.) 225
30.	Water	(litres) 32

Preparation :

Coarsely powder the drugs 1 to 28. Boil drugs 1 to 28 in 32 litres of water until reduced to $\frac{1}{4}$ of the volume. Filter and obtain decoction (8 litres). Take 800 ml. of the decoction and mix with the sesame oil. Boil the mixture until only very little of water remains in the oil. Then add 800 ml. of decoction and continue boiling until almost dehydrated and repeat this process till all the decoction is used up in 10 instalments. Finally boil with the goat's milk and the decoction sediment until dehydration. Remove from over just at the stage where all the water is lost and decant and express the oil from the sediment and bottle for use. Use the oil only after 7 days after preparation.

Action and uses :

Used as nasal drops in diseases of the head and nose, such as head ache and cold etc.

145. ARIMEDADHI THAILA

(Bhaishajyaratnavali : Mukharogadhikara)

Drugs required :

	gms.
1. Bark of cassie flowers tree (fresh desirable)	5000
2. Sesame oil	1500
3. Indian madder	12
4. Lodh tree bark	12
5. Liquorice	12
6. Cassie flowers	12
7. Root of small cashmere tree	12

		gms.
8. Lac sticks	..	12
9. Bark of banyan tree	..	12
10. Lesser cardamoms	..	12
11. Black catechu	..	12
12. Camphor	..	12
13. Eagle wood	..	12
14. Himalayan cherry wood	..	12
15. Cloves	..	12
16. Cubebs	..	12
17. Nutmeg	..	12
18. Bark of sappan wood	..	12
19. Red ochre	..	12
20. Turmeric	..	12
21. Nagakeshar stamens	..	12
22. Water	(litres) ..	12.5

Preparation :

Crush drug No. 1, prepare decoction in the water and reduce to $\frac{1}{4}$. Cool and filter.

Make a fine paste of 2 to 21 in sufficient quantity of water by grinding. Mix the decoction, paste and oil and prepare thaila by boiling and completely evaporating the water. Bottle the thaila and use after a week (Camphor is usually added to filtered Taila).

Action and uses :

Antibacterial and antiseptic. Used in the diseases of the teeth and gums. Useful in shaky dentition and pyorrhoea. Deodorant of the mouth.

146. ASANAVILVADI THAILA
(Sahasrayoga : Thaila Prakarana)

Drugs required :

		gms
1.	Madras kino wood ..	1000
2.	Bael roots ..	1000
3.	Sida roots (Bala root) ..	1000
4.	Tinospora root & thick stem ..	1000
5.	Sesame oil (litres) ..	4
6.	Cow's milk (litres) ..	16
7.	Liquorice ..	200
8.	Dry ginger ..	200
9.	Three myrobalans (each) ..	200
10.	Water (litres) ..	50

Preparation :

Boil the crushed drugs 1 to 4 in 50 litres of water and prepare decoction concentrated to $\frac{1}{4}$ volume. Cool and filter. Mix the decoction, oil, milk, and the soft paste of 7 to 9. Prepare thaila by dehydrating on an oven and separating the sediment. Expel and take also the oil, soaked in the sediment.

Action and uses :

Applied externally before bath and applied to the head in diseases of the eyes, ears and cranium. Useful in diseases like rheumatic affections of the head.

147. BALAGUDOOCHYADI THAILA

(Sahasrayoga : Thaila Prakarana)

Drugs required :

		gms.
1. Sida root (bala root)	..	300
2. Tinospora root	..	300
3. Himalayan cedar wood	..	300
4. Sesame oil	..	900
5. Nardus root	..	30
6. Costus root	..	30
7. Sandal wood	..	30
8. Olibanum (Frankincense)	..	30
9.. Indian valerian	..	30
10. Withania root	..	30
11. Wood of pine (3 leaved) tree	..	30
12. Lesser galangal	..	30
13. Vetiver	..	30
14. Liquorice	..	30
15. Nut grass tubers	..	30
16. Water	(litres) ..	14.5

Preparation :

Crush and boil the first three drugs in the water until reduced $\frac{1}{4}$ of the original volume of water. Cool, filter and take decoction.

Make a soft paste of 5 to 15.

Mix the decoction, oil and paste and prepare thaila by heating the mixture on an oven until complete dehydration. Decant and take the thaila. Extract the oil from the sedimented paste also and mix with the decanted oil. Store for a week before use.

Action and uses :

Relieves pain and burning sensation of the body when applied externally. Also applied to inflammatory and rheumatic swellings; for application for head also regularly.

148. BALA ASWAGANDHADI THAILA

(Sahasrayoga : Thaila prakarana)

Drugs required :

		gms.
1.	Sida roots (bala roots)	270
2.	Withania roots	270
3.	Lac sticks	270
4.	Sesame oil	(ml.) .. 800
5.	Curd supernatant	(ml.) .. 3000
6.	Lesser galangal	.. 12.5
7.	Sandal wood	.. 12.5
8.	Indian madder	.. 12.5
9.	Bermuda grass	.. 12.5
10.	Liquorice	.. 12.5
11.	Round zedoary	.. 12.5
12.	Indian sarsaparilla root cortex	.. 12.5
13.	Vetiver	.. 12.5
14.	Nut grass tubers	.. 12.5
15.	Costus root	.. 12.5
16.	Eagle wood	.. 12.5
17.	Himalayan cedar wood	.. 12.5
18.	Turmeric	.. 12.5
19.	Water lily rhizomes	.. 12.5
20.	Piper aurantiacus fruits	.. 12.5
21.	Garden rue	.. 12.5
22.	Lotus flower—stamens	.. 12.5
23.	Water	(litres) .. 12.5

Preparation :

Crush drugs 1 to 3 and prepare decoction in the water and concentrate it to $\frac{1}{2}$ of the volume and cool and filter. Prepare a soft paste of drugs 6 to 22. Mix the oil, curd supernatant, decoction and the paste and boil on an oven until dehydrated and obtain thaila.

Action and uses :

Restorative tonic and a nervine tonic. Useful in neurites and loss of weight. For internal as well as external use. Useful in treatment of tuberculotic emaciation.

Dose :

1 to 4 ml. with hot milk, twice or thrice a day (Rubbed on the body and before baths.)

149. BHOONAGA THAILA
(I.M.P.C.P.)

Drugs required :

			gms.
1. Earth worms fresh	..	3 X	200
2. Sida root (bala root)	..	3 X	200
3. Castor roots	..	3 X	200
4. Roots of common yellow nail dye plant	..	3 X	200
5. Indian bdellium	..	3 X	3
6. Sweet flag	..	3 X	3
7. Rind of chebulic myrobalan	..	3 X	3
8. Roots of calotropis	..	3 X	3
9. Fruit of falcate trumpet flower	..	3 X	3

			gms.
10.	Roots of leptadenia	.. 3 X	3
11.	Indigo roots	.. 3 X	3
12.	Asafoetida	.. 3 X	3
13.	Round zedoary	.. 3 X	3
14.	Garlic	.. 3 X	3
15.	Croton seeds	.. 3 X	3
16.	Costus root	.. 3 X	3
17.	Sida roots (bala roots)	.. 3 X	3
18.	Castor roots	.. 3 X	3
19.	Roots of common yellow nail dye		
	plant	.. 3 X	3
20.	Garden rue	.. 3 X	3
21.	Water	(litres) ..	12.5
22.	Sesame oil	..	800

Preparation :

Prepare decoction of drugs 1 to 4 (with 1 part of each at a time) concentrate to $\frac{1}{4}$ and cool and filter. Make a soft paste of drugs 5 to 20.

Mix the oil, decoction and the paste and boil on the oven until all the water is lost. Remove from oven, allow to cool and recover all the oil. Repeat this process two more times with the same recovered oil using fresh decoction and paste of the two remaining parts of the drugs.

Keep the thaila for one week and then use.

Action and uses :

Used externally in paralysis, hemiplegia, facial paralysis and aphasia. Given internally with hot milk.

Dose :

When given internally, 0.6 to 2ml. twice a day with hot milk.

150. BRINGAMALAKA THAILA
(Sahasrayoga : Thaila Prakarana)

Drugs required .

	gms.
1. Juice of Eclipta prostrata (fresh) ..	800
2. Emblic myrobalan fresh juice ..	800
3. Cows' milk ..	3.200
4. Sesame oil ..	800
5. Liquorice ..	50

Preparation :

Prepare liquorice paste by grinding with sufficient quantity of water. Mix all the four fluid drugs and add the paste of liquorice. Prepare thaila by boiling the mixture on an oven until dehydrated. Recover all the oil from the preparation. Store for a week and then use.

Action and uses :

Meant for external application on scalp.

Regular application to the scalp improves vision, alleviates headache, and gives good sleep. Good for the growth of hair. In headaches and partial headaches a few drops are instilled into the nostrils. In the diseases of the eyes, the oil is rubbed to the soles.

When used as a hair-oil for longer times it improves memory. In insomnia, oil-bath with this thaila is recommended. It removes or retards baldness and promotes hair growth and gives black colour to hair and prevents greying to some extent.

151. BRAHMI THAILA (I.M.P.C.P.)

Drugs required :

	gms
1. Juice of Indian penny wort	400
2. Emblic myrobalan juice	400
3. Sesame oil	800
4. Flesh of chebulic myrobalan	60
5. Nardus root	60
6. Cinnamon leaves	60
7. Sandal wood	25

Preparation :

Make soft paste of 4 to 7. Mix 1, 2 and 3. Prepare thaila. Usually Thaila is prepared with 3200 ml. of water in addition to the above ingredients.

Action and uses :

To be applied externally on the scalp. Cooling. Improves memory. Regular application is much beneficial.

152. CHANDANADI THAILA

(Bhaishajyaratnavali: Vajeeekarana Adhikara)

Drugs required :

	gm*
1. Sandalwood	3
2. Red sanders	3
3. Black sandal wood	3
4. Sappan wood	3
5. Eagle wood	3
6. Black eagle wood	3
7. Himalayan cedar wood	3
8. Pine wood	3
9. Himalayan cherry wood	3

		gms
10. Flowers of ceylon jasmine	..	3
11. Indian olibanum resin	..	3
12. Saffron	..	3
13. Nut meg	..	3
14. Mace	..	3
15. Cloves	..	3
16. Cardamoms larger	..	3
17. Cardamom lesser	..	3
18. Star anise fruits	..	3
19. Cubebs	..	3
20. Cinnamon bark	..	3
21. Cinnamon leaves	..	3
22. Nagakeshar stamens	..	3
23. Black vetiver	..	3
24. Vetiver	..	3
25. False calumba stem (ceylon calumba)	..	3
26. Majorana	..	3
27. Camphor pure	..	3
28. Rock lichen (Parmelia)	..	3
29. Nut grass tubers	..	3
30. Piper aurantiacus fruits	..	3
31. Flowers of Roxburgh's tree of beauty	..	3
32. Colophony	..	3
33. Indian bdellium	..	3
34. Operculum of apple snail	..	3
35. Sal tree resin	..	3
36. Fire flame flowers	..	3
37. Lac	..	3
38. Nardus root	..	3
39. Sesame oil	(ml.) ..	800
40. Water	(litres) ..	3.200

Preparation :

Prepare a soft paste of 1 to 38, add to 39 and 40 and prepare thaila. (Camphor is added at last).

Action and uses :

Used for external application and oil bath in burning sensation of the body, itching, emaciation, wasting and skin diseases. Cooling in action.

153. DHATREE THAILA
(I.M.P.C.P.)

Ingredients required :

		gms.
1. Castor oil	..	800
2. Garlic juice	..	800
3. Indian penny wort juice	(litres) ..	3.2
4. Water	(litres) ..	3.2
5. Picrorrhiza	..	125

Preparation :

Make soft paste of Picrorrhiza and prepare thaila by boiling it with all the other liquid drugs until dehydrated.

Action and uses :

Given internally as a laxative. Used in abdominal pains and constipation.

Applied and rubbed externally on paining joints and inflammatory swellings.

Dose :

15 to 30 ml. Given in the morning with hot milk.
One dose

154. DHANVANTARA THAILA

(Sarvaroga chikitsaratna : Vata prakarana)

Drugs required :

		gms.
1.	Sida root (bala root)	1200
2.	The ten roots (each)	15.5
3.	Barley	15.5
4.	Horse gram	15.5
5.	Water (litres)	22.5
6.	Sesame oil	800
7.	Cow's milk (litres)	4.8
8.	Himalayan cedar wood	6.5
9.	Sarsaparilla	6.5
10.	Pillipesara herb	6.5
11.	Rock sa't	6.5
12.	Sweet flag	6.5
13.	Cardamoms	6.5
14.	Indian madder	6.5
15.	Costus root	6.5
16.	Cinnamon leaves	6.5
17.	Teramnus labialis herb	6.5
18.	Eagle wood	6.5
19.	Withania roots	6.5
20.	Liquorice	6.5
21.	Rue	6.5
22.	Sandalwood	6.5
23.	Indian valerian	6.5
24.	Rock lichen (Parmelia)	6.5
25.	Spreading hog weed root	6.5
26.	Asparagus roots	6.5
27.	Cinnamon bark	6.5
28.	Three myrobalans (each)	6.5
29.	Lesser ga'angal	6.5
30.	Leptadenia stem	6.5
31.	Eight drugs (each)	6.5

Preparation :

Clean, crush and boil 1 to 4 in 22.5 litres of water. After soaking them for a day reduce the decoction to $\frac{1}{4}$. Mix the decoction with 6 and 7 and prepare thaila with a soft paste of 8 to 31.

Action and uses :

Used in the treatment nervous disorders like paralysis, hemiplegia, facial paralysis, neuritis and neurasthenia. For external use only.

155. DINESHVALYADHI THAILA

(Sahasra Yoga : Thaila Prakarana)

Drugs required :

		gms.
1. Alkanet	..	250
2. Turmeric	..	250
3. Calotropis root	..	250
4. Tanners cassia bark	..	250
5. Peepal tree bark	..	250
6. Banyan tree bark	..	250
7. Fig tree bark	..	250
8. White fig bark	..	250
9. Water	(litres) ..	25
10. Sesame oil	(ml.) ..	800
11. Coconut oil	(ml.) ..	800

Preparation :

Take 200 gms. from each of the drugs 1 to 8, boil in 25 litres of water reducing the decoction to $\frac{1}{4}$. Prepare a soft paste of the remaining 50 gms. of the drugs and keep. Mix decoction gingelly oil, coconut oil and the paste and prepare thaila.

Action and uses :

For external application only. Useful in skin diseases like itching, eczema and boils etc.

156. DHOORVADHI THAILA
(I.M.P.C.P.)

Drugs required :

	gms.
1. Bermuda grass juice ..	3200
2. Coconut oil ..	800
3. Liquorice roots (paste) ..	50

Preparation :

Mix 1 and 2, put 3 and prepare thaila.

Action and uses :

Heals up ulcers and encourages tissue formation (regeneration) in the wounded regions. Useful in itch, eczema and other skin diseases also. External application only.

157. GANDHAKA THAILA
(I.M.P.C.P.)

Drugs required :

	gms.
1. Sulfur ..	300
2. Black pepper ..	150
3. Turmeric ..	50
4. Coconut oil (litres) ..	6.25

Preparation :

Prepare soft paste with Nos. 1 to 3 adding some water. Prepare thaila on mild fire.

Action and uses :

Antiinfective and healing in properties. Used in chronic ulcers, eczema, boils, itches and other skin diseases caused by microorganisms. Intended only for external use.

158. HINGUTRIGUNA THAILA

(Ashtanga Hridaya : Gulma Chikitsa)

Drugs required :

	parts
1. Asafoetida	.. 1
2. Rock salt	.. 3
3. Castor oil	.. 9
4. Garlic	.. 27
5. Water	.. 108

Preparation :

Make 1 and 2 into paste. Mix with 3, 4 and 5 and prepare thaila.

Action and uses :

Laxative, digestive, appetiser, anthelmentic and antiinflammatory. It suppresses swellings and removes pain and inflammation in joints. Relieves intestinal colic and chronic constipation.

Dose :

8 to 15 ml. with hot goat's milk or embelia decoction. Twice or thrice daily.

159. KSHARA THAILA

(Sarangadhara Samhita : Thaila prakarana)

Drugs required :

	gms.
1. Lime juice ..	3200
2. Honey ..	800
3. Long pepper ..	200
4. Citron juice (litres) ..	3.25
5. Juice from plantain rhizome (litres) ..	3.25
6. Sesame oil (ml.) ..	800
7. Ash of radish ..	12.5
8. Dry ginger ..	12.5
9. Asafoetida ..	12.5
10. Garlic ..	12.5
11. Rue ..	12.5
12. Sweet flag ..	12.5
13. Costus root ..	12.5
14. False calumba stem (ceylon calumba) ..	12.5
15. Drumstick bark ..	12.5
16. Berberies extract (or false calumba extract) ..	12.5
17. Sochnal salt ..	12.5
18. Two alkalis (each) ..	12.5
19. Black salt ..	12.5
20. Rock salt ..	12.5
21. Hima'ayan silver birch leaves ..	12.5
22. Long pepper root ..	12.5
23. Vit salt ..	12.5
24. Nut grass tubers ..	12.5

Preparation :

Make coarse powders of 3 and mix with 1 and 2. Seal the mixture in a pot and keep in a heap of grains

for a month. Filter and take the liquid for use. Mix it with 1, 5 and 6 and a soft paste of 7 to 24 and prepare thaila.

Action and uses :

Used in the treatment of infections and suppurative conditions of the ear and nose and disorders like otitis and ulcers in the nose etc. It is used as ear and nasal drops. It is useful also in dental diseases like gingivitis and pyorrhoea.

160. KARPOORADHI THAILA
(I.M.P.C.P.)

Drugs required :

	parts by weight
1. Decoction of Ajowan seeds ..	16
2. Camphor ..	1
3. Coconut oil ..	4

Preparation :

Boil 1 and 3 and prepare thaila upto hard stage and filter. Mix camphor with the thaila when it is hard. Store in tightly stoppered bottles.

Action and uses :

Counter irritant, relieves pain. Applied and rubbed over inflammatory swellings and on the chest in pneumonia and pleuracy. External application only.

* For decoction, boil 1 part by weight of ajowan seeds in 4 parts by weight of water, and reduce to $\frac{1}{4}$.

161. KARPASASTHYADI THAILA

(Sahasrayoga : Thaila Prakarana)

Drugs required :

		gms.
1. Cotton seeds	..	200
2. Sida roots	..	200
3. Black gram	..	200
4. Horse gram	..	200
5. Water	(litres) ..	13
6. Goat's mi'l'k	(ml.) ..	1600
7. Sesame oil	..	800
8. Flesh of jujube fruits	..	12.5
9. Sida roots	..	12.5
10. Lesser galangal	..	12.5
11. Himalayan cedar wood	..	12.5
12. Costus root	..	12.5
13. Cubebs	..	12.5
14. Mustard	..	12.5
15. Rue	..	12.5
16. Long pepper root	..	12.5
17. Drumstick tree bark	..	12.5
18. Spreading hog weed roots	..	12.5

Preparation :

Boil 1 & 2 in 6.5 litres of water, reduce decoction to $\frac{1}{4}$ and filter. Similarly prepare decoction of 3 & 4. Make a soft paste of 9 to 13. Mix the decoctions, goat's milk, sesame oil, and the paste and prepare thaila.

Action and uses :

Nervine tonic and antirheumatic. Used in paralysis, hemiplegia and similar diseases. Generally used externally only, but occasionally it is given with hot milk.

Dose :

10 to 15 ml. of the thaila is given internally with hot milk.

162. KSHEERABALA THAILA

(Ordinary)

(Sahasrayoga : Thaila Prakarana)

Drugs required :

		gms.
1. Sida root	..	250
2. Cow's milk	(litres) ..	3.200
3. Sesame oil	..	800
4. Water	(litres) ..	3.200

Preparation :

Grind sida root to a paste with some milk. Mix with sesame oil and the remaining milk and water. Prepare thaila.

Action and uses :

Tonic, useful in nervous disorders and rejuvenates the system. Useful in nervous debility. Used also for oil bath and as nasal drops.

Dose :

For external use only.

163. KSHEERABALA THAILA

(7 times repeated)

(Sahasrayoga : Thaila Prakarana)

Drugs required :

	parts by weight
1. Sida root decoction	.. 16 (X 7)
2. Sesame oil	.. 4 only
3. Cow's milk	.. 4 (X 7)
4. Sida root paste	.. 1 (X 7)

Preparation :

Prepare thaila with the above drugs. Add 1, 3 and 4 again in fresh amounts, with the thaila and obtain thaila again. Repeat the process 7 times in total with fresh amounts of drugs 1, 3 and 4 every time. The thaila thus prepared is seven times concentrated in strength as compared to the ordinary Ksheerabala thaila.

Action and uses :

Given internally as a nervine tonic to tone up the muscles, nerves and the brain. Useful in loss of weight and general debility.

Dose :

10 to 30 drops with hot milk or other suitable vehicle or in combination with other medicines.



164. KSHEERABALA THAILA

(28 times repeated)

(Sahasrayoga : Thaila Prakarna)

Preparation :

Repeat preparation of Ksheerabala thaila (using the same drugs as for Ksheerabala thaila 7 times) 28 times.

Action and uses :

Similar to Ksheerabala thaila 7 times. Much valued than Ksheerabala thaila 7 times.

Dose :

10 to 30 drops.

165. KSHEERABALA THAILA

(101 times repeated)

(Sahasrayoga : Thaila Prakarana)

Preparation :

Repeat thaila preparation 101 times following the recipe given for Ksheerabala thaila 7 times.

Action and uses :

The most effective than the preceding three types of Ksheerabala thailas. Useful in nervous debility, insomnia, hypertension, rheumatoid arthritis.

Dose :

10 to 30 drops. Once or twice a day with either warm water or milk. Taken internally. It can be applied to head in case of severe nervous breakdown, and insomnia.

166. MANJISHTADHI THAILA
(Sahasrayoga : Thaila Prakarana)

Drugs required :

1. Sesame oil	(kg.)	..	2.25
2. Cow's milk	(kg.)	..	10
3. Fresh pulp of aloe leaves	(kg.)	..	10
			gms
4. Indian madder		..	12
5. Galena		..	12
6. Indian sarsaparilla		..	12
7. Nut grass tubers		..	12
8. Picrorrhiza		..	12
9. Star anise		..	12
10. Nutmeg		..	12
11. Sandal wood		..	12
12. Three myrobalans (each)		..	12
13. Nardus root		..	12
14. Indian valerian		..	12
15. Costus root		..	12
16. Liquorice		..	12
17. Four aromatics (each)		..	12
18. Vetiver		..	12
19. Eaglewood		..	12
20. Round zedoary		..	12
21. Water lily rhizome		..	12
22. Black vetiver		..	12
23. Lotus stalks		..	12
24. Camphor pure		..	12

Preparation :

Prepare a soft paste of 4 to 23 and prepare thaila with 1 to 3. Camphor (and some quantity of musk) is to be added to the thaila after preparation.

Action and uses :

In head aches and diseases of the eye. It is applied externally. It is useful in other diseases of the head such as migraine etc.

167. MAHAMASHA THAILA

(Bhaishajya ratnavali : Vata rogadhikara)

Drugs required :

		gms
1. Goat's meat	..	1500
2. Blackgram	..	1600
3. Ten roots (each)	..	250
4. Water	(litres) ..	37.50
5. Sesame oil	(ml.) ..	800
6. Cow's milk	(ml.) ..	8200
7. Climbing nettle root	..	13
8. Castor roots	..	13
9. Rue	..	13
10. Four salts (each)	..	13
11. Eight drugs (each)	..	13
12. Indian madder	..	13
13. Small cashmere tree roots	..	13
14. Six spices (each)	..	13
15. Lesser galangal	..	13
16. Liquorice	..	13
17. Himalayan cedar wood	..	13
18. Tinospora	..	13
19. Costus root	..	13
20. Withania root	..	13
21. Sweet flag	..	13
22. Round zedoary	..	13

Preparation :

Boil the meat in 12 5 litres of water and reduce to $\frac{1}{2}$. Filter and take the decoction. Similarly prepare decoctions of black gram and ten roots in the same quantities of water and reduce to $\frac{1}{2}$. Filter the decoctions.

Prepare a soft paste of 7 to 22 and prepare thaila.

Action and uses :

Useful in all nervous disorders and paralytic conditions. Employed in the treatment of hemiplegia, facial paralysis, arthritis, neuritis, pains and muscular atrophy. Intended for external use only.

168. NALPAMARADI THAILA
(Sahasrayoga : Thaila prakarana)

	gms.
Drugs required :	
1. The four ficus barks (each) ..	10
2. Sesame oil (ml.) ..	260
3. Coconut oil (ml.) ..	260
4. Three myrobalans (each) ..	10
5. Sandal wood ..	10
6. Vetiver ..	10
7. Costus root ..	10
8. Indian madder ..	10
9. Round zedoary ..	10
10. Eagle wood ..	10
11. Turmeric ..	260
12. Mollugo cerviana ..	260
13. Water (litres) ..	8.32

Preparation :

Prepare decoction of the drugs 11 and 12 (crushed), by boiling them in the given water and reducing to $\frac{1}{4}$. Filter and keep the decoction.

Prepare a soft paste of 1 and 4 to 10 and prepare thaila by heating with decoction and 2 and 3, until hard stage.

Action and uses :

Useful in skin diseases like eczema, itch, boils etc. For external use only.

**169. NIRAYANA THAILA**

(Sahasrayoga : Thaila prakarana)

Drugs required :

		gms.
1.	Withania roots	500
2.	Bael roots	500
3.	Sida root (bala root)	500
4.	Roots of Indian trumpet flower tree	500
5.	Indian night shade roots	500
6.	Jacquins night shade roots	500
7.	Small caltrops root	500
8.	Country mallow roots	500
9.	Margosa roots	500
10.	Spreading hog weed roots	500
11.	Indian trumpet flower bark	500
12.	Field bind weed	500
13.	Spinous fire brand tree roots	500
14.	Water (litres)	50
15.	Asparagus juice fresh (litres)	3.2
16.	Cow's milk (litres)	12.5

		gms.
17. Sesame oil	(litres) ..	3 2
18. Costus root	..	100
19. Cardamom	..	100
20. Sandalwood	..	100
21. Bow string hemp rhizome	..	100
22. Sweet flag	..	100
23. Nardus root	..	100
24. Rock salt	..	100
25. Withania roots	..	100
26. Sida root (bala roots)	..	100
27. Lesser galangal	..	100
28. Rue	..	100
29. Himalayan cedar wood	..	100
30. Indian valerian	..	100
31. Two wild grams	..	100
32. Unifoliate tick trefoil	..	100
33. Sweet smelling hare foot	..	100

Preparation :

Boil 1 to 13 in water and reduce the decoction to $\frac{1}{4}$. Mix the decoction with 15, 16 and 17. Prepare soft paste of 18 to 33. Prepare thaila by boiling and dehydrating the mixture of fluid drugs and this paste.

Action and uses :

Used in the treatment of paralysis and similar diseases relating to the nervous system. External use only.

170. NEELIBHRINGADI THAILA

(Sahasrayoga : Thaila prakarana)

Drugs required :

	ml.
1. Indigo leaf juice fresh	800
2. Eclipta prostrata juice fresh	800
3. Baloon vine juice	800
4. Emblic myrobalans juice	800
5. Goat's milk	800
6. Cow's milk	800
7. Buffalow's milk	800
8. Coconut milk	800
9. Sesame oil	800
10. Liquorice	35
	gms.
11. Wild liquoricee	35
12. Galena*	35

Preparation :

Prepare a soft paste of 10, 11 and 12 and prepare thaila by boiling with 1 to 9. (usually No. 12 is finely powdered and added to the oil after preparation).

Action and uses :

For application to scalp. Cooling action. Promotes hair growth and prevents greying. To a certain extent it gives black colour to the hairs. Used as a hair oil. Regular application cools the eyes.

* In practice, only 12 gms. is used.

171. NEELIEHRINGADI THAILA

(With coconut oil)

(I.M.P.C.P.)

This thaila is prepared with coconut oil instead of sesame oil. Preparation and properties similar to Neeliehringadi thaila prepared with sesame oil.

172. NIMBADHI THAILA

(I.M.P.C.P.)

Drugs required :

	gms.
1. Margosa seed oil	800
2. Chaulmogra oil	800
3. Camphor pure	100

Preparation :

Rub margosa seed oil and camphor. Then add chaulmogra oil and grind until all the drugs are mixed well.

Action and uses :

Antiseptic, healing. Application to wounds and ulcers accelerates regeneration of tissue in the affected regions and heals. Antimicrobial. Used with benefit in all types of skin diseases inclusive of lepromatous ulcers. External use only.

173. NIRGUNDEE THAILA

(Sarvarogachikitsaratnam : Karnarogadhikara)

Drugs required :

	ml.
1. Negundo juice	800
2. Calotropis leaf juice	800
3. Drumstick leaf juice	800
4. Tamarind leaf juice	800
5. Sacred basil leaf juice	800
6. Dathura leaf juice	800
7. Black night shade juice	800
8. Prickly chaff flower juice	800
9. Black musale juice	800
10. Turmeric juice	800
11. Banana rhizome juice	800
12. Ginger juice	800
13. Eclipta prostrata juice	800
14. Goat's urine	800
15. Sesame oil	800
	gms.
16. False calumba stem	25
17. Sweet flag	25
18. Garlic	25
19. Costus root	25
20. Rock salt	25
21. Lead wort root	25
22. Dry ginger	25
23. Long pepper	25
24. Black pepper	25
25. Sal tree resin	25

Preparation :

Grind 16 to 24 into a soft paste, boil with a mixture of 1 to 15 and prepare thai'a. (Usually No. 25 is added to the oil after preparation, when hot, and dissolved.)

Action and uses :

Specially used in the diseases of the ear. Used as dressing for chronic ulcers and externally applied and rubbed in joint pains (arthritis) and rheumatic swellings.

174. PINDA THAILA

(Sahasrayoga : Thaila Prakarana)

Drugs required :

	gms.
1. Indian sarsaparilla	50
2. Indian madder	50
3. Sal tree resin	50
4. Bees wax	50
5. Sesame oil	800
6. Water	(litres) 3.2

Preparation :

Take Nos. 1 and 2, clean, crush and boil in 3.25 litres of water. Reduce the decoction to $\frac{1}{4}$, filter. Mix this decoction with sesame oil and prepare thaila. Then add fine powders of 3 and small chips of 4 and warm gently until the drugs are dissolved completely.

Action and uses :

Healing, antiinflammatory and antimicrobial. Used in arthritis, inflammatory swellings, burns and wounds. Applied to fissured soles.

For external use only.

175. PRABHANJANA VIMARDHANA THAILA
(Sahasra Yoga : Thaila Prakarana)

Drugs required :

		gms.
1.	Sida roots	100
2.	Asparagus roots	100
3.	Drum stick bark	100
4.	Bark of three leaved caper tree	100
5.	Calotropis root	100
6.	Pongamia bark	100
7.	Roots of castor plant	100
8.	Yellow nail dye plant root	100
9.	Withania roots	100
10.	Field bind weed	100
11.	Five roots—Greater (each)	100
12.	Water (litres)	26
		gms.
13.	Sesame oil	1600
14.	Curd	3200
15.	Milk	3200
16.	Sour kanji	3200
17.	Indian valerian	10
18.	Cedar wood	10
19.	Cardamoms	10
20.	Dry ginger	10
21.	Mustard	10
22.	Round zedoary	10
23.	Dill seeds	10
24.	Costus roots	10
25.	Rock salt	10
26.	Lesser galangal	10
27.	Fenugreek seeds	10
28.	Sweet flag	10
29.	Lead wort root	10

	gm :
30. Nardus root ..	10
31. Pine wood ..	10
32. Picrorrhiza ..	10

Preparation :

Boil in the given quantity of water, drugs 1 to 16 until the decoction is reduced to $\frac{1}{2}$. Prepare a soft paste of drugs 17 to 32. Add to the decoction sesame oil, curd, milk and sour kanji and prepare thaila using the soft paste.

Action and Uses :

Employed in the treatment of all nervous disorders and paralysis. It is applied externally on the regions affected or all over the body. It is given internally as well.

Dose :

When given internally 5 to 15 ml. with hot milk. Two or three doses a day.

176. THRIPHALADI THAILA
(Sahasrayoga : Thaila prakarana)

Drugs required :

	gms.
1. Three myrobalans (each) ..	90
2. Tinospora ..	90
3. Screw pine roots ..	90
4. Madras kino wood ..	90
5. Sida roots ..	90

			gms.
6.	Castor roots	..	90
7.	Colocynth roots	..	90
8.	Water	(litres) ..	12.5
9.	Eclipta prostrata juice	(ml.) ..	800
10.	Emblie myrobalan juice	(ml.) ..	800
			gms.
11.	Cow's milk	.	1600
12.	Sesame oil	..	800
13.	Costus root	..	10
14.	Liquorice	..	10
15.	Himalayan cherry wood	..	10
16.	Vetiver	..	10
17.	Sandalwood	..	10
18.	Nut grass tubers	..	10
19.	Cardamoms	..	10
20.	Cinnamom leaves	..	10
21.	Nardus root	..	10
22.	Withania root	..	10
23.	Tinospora roots and thick stems	..	10
24.	Sida root	..	10
25.	Indian sarsaparilla	..	10
26.	Himalayan cedar wood	..	10
27.	Cloves	..	10
28.	Indian valerian	..	10
29.	Round zedoary	..	10
30.	Five water lilies—rhizomes (each)	..	10
31.	Roots of indigo plant	..	10
32.	Black antimony (Galena)	..	10

Preparation :

Boil 1 to 7 in 16 litres of water, reduce the decoction to $\frac{1}{2}$ and filter. Add to the filtered decoction 9, 10, 11 and 12. Prepare soft paste of 13 to 31. Prepare thaila using the mixture of the liquids and this paste. Finally add powders of 32 and store.

Action and Uses :

Externally applied in diseases of the head and eyes.
Arrests balding and greying.

177. VISHA MUSHTI THAILA

(Basavarajeeya : Vataroga Prakarana)

Drugs required :

	gms.
1. Nux vomica fruit pulp from ripe fruits ..	870
2. Jowar kanji ..	6400
3. Juice of lime fruit ..	1600
4. Nux vomica seed ..	800
5. Castor oil ..	800
6. Sesame oil ..	1600
7. Water (litres) ..	6.4
8. Nux vomica seed (paste) ..	800

Preparation :

Boil the crushed nux vomica seeds in water and reduce decoction to $\frac{1}{4}$. Mix the decoction with Jowar kanji. Add the rest and prepare thaila.

Action and Uses :

Antiinflammatory and antineuritic. Only for external application.

SECTION XIV

BHASMA & SINDOORA

1. BHASMA

Concept and Terminology :

Bhasma are equivalent to calx, which are prepared by a process of calcination. Bhasma are made by calcining the given drugs, which may either be organic or inorganic in origin. The materials which are made into Bhasma in Ayurveda, vary from minerals to metals, and animal to plant products. Chemically, the bhasma are oxides or ashes of the drug concerned, in a state of fine division, with a certain proportion of these particles in the colloidal dimensions.

Preparation :

The following equipments are required for the preparation of bhasma :—

1. The necessary drugs.
2. Mortar and pestle.
3. Long cloth ribbon and some wet clay.
4. Two shallow earthen discs of identical dimensions.
5. Cow dung cakes—sufficient numbers.
6. Cloth of fine mesh.
7. Vessels to prepare and handle juices and decoctions.
8. Spatulae of small size for handling the bhasma.

Notes on the Drugs used :

1. The drugs should be purified according to the convention of Ayurvedic science and then only taken for use in medicine.
2. The material taken should be properly identified
3. Great care should be exercised when plunging or pouring a heated metal into a fluid for purification so that the splashing liquid or metal may not cause injury

Method of Preparation of Bhasma :

The material which is to be made into bhasma is cleaned and purified according to the method prescribed for that particular material. This purification process is very important in that the poisonous organic and inorganic drugs are rendered fit for medicinal use. The purification processes consist mainly of soaking, boiling or grinding the drugs in specific fluids such as juices of green drugs or decoctions of dry drugs. Sometimes, the metals are heated or melted and suddenly plunged or poured in some oils or infusions. Care should be taken to protect oneself from being injured in any way when handling molten or heated metals. (Information on purification of drugs is given at the end of this book).

When the drugs are purified and ground with the prescribed infusions, they are made into small circular cakes and dried. When dry, they are taken for calcination.

"capsule" type crucible. The seal is allowed to dry and when it is completely dried the crucible is taken and placed in the kiln for calcination.

The kiln or 'Puti' as it is called in sanskrit, is made up of digging a pit in the soil and filling it with dry cow dung cakes as fuel. The size of the pit is dependent upon the number of cow dung cakes used per operation. The cow dung cakes of fair size, are circular disks with a diameter of about 10" and a thickness of 3". (It is better that the interior of the kiln is constructed of bricks).

75% of the prescribed number of cow dung cakes are arranged in the pit and then the sealed crucible is placed in the centre. The rest of the dung cakes are arranged over the capsule. The top of the heap of cow dung cakes should be in the form of a dome, so that when the top is set fire to it will spread evenly in all directions.

The kiln will be burning for a long time until all the dung cakes are converted into ashes. When the kiln is cooled down, the ashes are carefully removed and the crucible is taken out without damaging the seal. Then the exterior is cleaned and the seal is scraped off. The material kept inside would have been calcined and it is collected.

For the complete transformation of the material into the bhasma state, this process of calcination may have to be repeated a number of times or as many times as directed in the recipe. However the calcination is repeated until a satisfactory product is obtained in most of the preparations. But where a recipe reads that the calcination should be repeated for a particular number of times, the process is usually repeated so many times as prescribed even if a satisfactory bhasma is obtained within a few repetitions.

All the bhasma are in the form of extremely fine powders when properly prepared.

While preparing the bhasma of Lead, Tin and Zinc the number of cow dung cakes used, should always be comparatively lesser than the number used for other metals, because excessive heating will result in the reversal of the bhasma into metallic state.

Test for Complete Calcination :

To test whether the given material has been completely calcined, several tests are in use.

1. Different materials attain specific shades of color when completely calcined. This color change could be learnt only by experience.

2. A pinch of bhasma gently put on water, floats on the surface, if it is fully calcined (varitharanam).

3. A pinch of bhasma put gently on water and floats on the surface even if a horse gram is placed on it (Hamsawath-tharana).

4. When a pinch of bhasma is taken and pressed between the fingers, it shows clear impressions of finger prints and the particles of bhasma will be seen in the furrows of the finger prints (Rakha poornatha).

5. When a bhasma is satisfactorily prepared, it is irreversible to its metallic or original form when heated with a mixture of (1) Cane jaggery (2) Hemp leaf powder (3) Bdellium (4) Ghee and (5) Honey.

Storage of Bhasma :

Bhasma are stored in glass bottles usually. For smaller packings, vials of glass or plastics could be used. Capsule packing could also be done when equipment is available. The medicines should always be relevently labelled.

2. SINDOORA

Concept and Terminology :

Sindooras are medicines containing mercury in the form of its red sulfide. The red sulfide of mercury is known in Sanskrit, as 'Rasa Sindooras'. In these preparations the metallic form of mercury is taken and processed with a variety of drugs and heated. The mercury is eventually converted into its sulfide form which is 'sindooras'. The sindooras are considered very potent medicines and much esteemed in the Indian systems of medicine. The manufacture of sindooras, necessitates a completely different type of apparatus which is dissimilar to the crucible used in the preparation of bhasma. Sindooras are prepared by a process of sublimation.

Preparation :

Equipment required :

For the preparation of sindooras, the following equipment is generally necessary :—

1. The necessary drugs in a clean purified form.
2. Mortar and pestle.
3. Vessels to handle liquids.
4. Small spatulae for handling the sindooras.
5. A fairly long and thin iron rod or spoke.
6. A large earthen vessel with wide mouth—it should be preferably in the form of a trough.
7. Two enamelled iron bowls of identical dimensions with a small central hole on one of them. This is the set up used in large scale manufacture. Formerly, for small scale preparation, glass flasks with narrow necks were used.

8. Several yards of cloth ribbon and some clay for sealing.

Process of Preparation :

First the khajjali is prepared with the necessary metals including mercury, with sulfur.

The metals like gold which are solid are beaten into thin sheets or filed into granules and ground with mercury to form an amalgam. Then the sulfur is added and grinding is continued until a fine black mass called khajjali is obtained. The khajjali is then treated according to the prescription with other drugs or infusions and juices. Then the treated khajjali is dried and powdered for making the sindoora. The powder so prepared is put into the glass flask. The flask is wound around with the clay smeared ribbon to form a thick pad around. As many as 7 layers are wound and dried. The mouth of the flask is left open.

When enamelled iron bowls are used instead of glass flask, one of them is centrally punched to provide an exhaust hole to vapours. This hole corresponds to the mouth of the flask. The enamelled iron bowls are preferred because, they are cheaper, unbreakable and could be handled safely. The powdered khajjali is put into the good bowl and the perforated one is inverted over it. The cloth ribbon is wound around as is done when a glass flask is used.

The flask or capsule is taken when the seal is dried and placed in the centre of the earthen trough which has been filled with sand to a depth of $\frac{1}{2}$ inch. Then more sand is put around the flask capsule to fill the space, between the trough and the flask or capsule. Thus, the material is enclosed in a sand bath. The neck of the flask should be projecting atleast 1" above the level of

sand. The sand bath is then placed on a big oven and heating is commenced. First the flames should be just touching the bottom of the sand bath. This intensity of fire is maintained until all the sulfur inside the flask or capsule is melted. The sulfur then begins to evaporate and the vapours are given off through the opening. When the vapours of sulfur are given off, the intensity of fire is increased so that the flames lick the sides of the sand bath. At this stage, the formation of sindoorā commences. Then the intensity of fire is still increased so that the flames encircle the sand bath. At this stage, the formation of sindoorā is rapid.

Any how, the intensity of fire applied should not be disproportionate to the size of the set up or quantity of materials taken. This is learnt by experience.

If in any case, sulfur overflows and runs into the oven and contributes to the fire, a large trough is inverted over the sand bath and the burning woods are withdrawn. The fumes of sulfur and mercury are corrosive in property and so, one should not inhale them too much.

When the sulfur is molten, if an iron rod is introduced into the opening and taken out, a dark sticky fluid sticks to it. But when the sindoorā is completely formed and no free sulfur remains, a whitish coat forms on the rod.

When the formation of sindoorā is completed, the bottom of the flask is red hot and if a stone is held or placed on the opening, a white deposit forms on it.

The principle behind the formation of sindoorā : The mercury and sulfur, during the preparation of khajjali, undergo a certain amount of chemical combination pro-

ducing black sulfide of mercury. This is the reason why khajjali is black inspite of the mercury being silvery and sulfur of a golden color. But the meta's like gold do not enter into a chemical bondage with sulfur. So, they remain free as metallic particles and get oxidised. When subjected to heating on the sand bath, the excess of sulfur is burnt out or evaporated and is lost either as sulfur dioxide or as vapours of sulfur. The black sulfide of mercury is converted into red sulfide or Mercury and sublimated at the top of the flask or capsule or bowls. The temperature at the opening is such that it is below the vapourisation point of mercury or its compounds, but sufficiently high to evaporate free sulfur. (If the heating is disproportionate as said earlier, the sindooras will also be evaporated in part. Hence, the necessity of regulating fire).

The time limit in the preparation of sindooras should be strictly adhered to as far as possible. However, constant watch should be kept on the process. If the sindooras are completely formed before the time limit, the heating should be stopped forthwith. Similarly if the sindooras are not formed completely even after the time limit, the heating should be continued until the process is over. The prescribed time limit is hence a guide and is not final.

When signs of the completion of the process of formation of sindooras are noticed, the fire is removed from the oven and the opening on the flask or capsule is closed with a piece of stone and sealed with some quick lime. When the complete setup is cooled down, the flask or capsule is carefully removed and the exterior is completely cleaned.

In the case of the flask, the sindooras are collected after breaking the flask. In the case of enamelled iron

bowls, the two bowls are separated and the sindoorā is scraped and collected. No mud particles or glass particles should be allowed to mix with the sindoorā.

The sindoorā is formed in a thick layer around the neck of the flask and at the opening in the case of the capsule.

If any more material remains at the bottom, unconverted into sindoorā, it is collected separately and treated in a similar way on the sand bath with the addition of some more sulfur.

If the processing were correctly carried out, the weight of the sindoorā is equal to the weight of mercury taken.

When the metals like gold are used, they usually remain in a form of fine powder at the bottom. This powder is collected and mixed with the sindoorā. In preparations like Makaradwaja and Poornachandrodaya, the gold powder settled at the bottom is collected separately and mixed with the sindoorā, when required.

If it is doubted that some sulfur or mercury is remaining in combination with these metals, the collected mass is subjected to heating in a spoon until they are removed and then the powder is taken for use.

Sindoorā are in the form of granular particles and they are converted into fine powders for use by grinding.

The physical properties of bhasma and sindoorā and the importance of such properties in pharmacological activity of minerals and metals :—

Metals as such are said to be poisonous in action when ingested. But when taken in the form of salts or calxes or oxides in minute quantities they are of medi-

cinial value. The science of Ayurveda makes such poisonous metals as mercury and lead, into materials of medicinal value.

Apart from this, most compounds of metals and minerals are not absorbed by the body, because under ordinary circumstances the substances could not be reacted upon by the secretions of the digestive system, so as to render them absorbable by the body. This difficulty is over-come only if the particles are very minute.

For instance, mica is practically insoluble in water or dilute hydrochloric acid, but, when it is converted into a bhasma, a high percentage goes into solution in hydrochloric acid of approximately the same strength of gastric juice.

Similarly, the metallic gold produces, toxic symptoms simulating those of arsenic, but in the colloidal state it has been found to be beneficial to the system. The Swarna bhasma which is prepared by the Ayurvedists, contains particles of gold which range into colloidal dimensions.

The repeated grinding and the heat treatment given to the materials reduces the materials so treated, into different chemical compounds or at least into fine particles which are capable of being acted upon by the system.

Storage of Sindoor :

The sindoor are stored in glass bottles when they are to be stored in bulk. For smaller packings, small tubes of plastic are conducive.

178. ABHRAKHA BHASMA

(Thirty times calcined)

(I.M.P.C.P.)

Drugs required :

1. Mica—hard black variety (quantity to be calcined)
2. Cow's urine (sufficient quantity)
3. Paddy (some quantity)
4. Sour kanjee (sufficient quantity)
5. Juice of Adhatoda leaves (sufficient quantity)
6. Juice of amarantus viridis (sufficient quantity)
7. Juice of spreading hog weed (sufficient quantity)
8. Juice of negro coffee plant (sufficient quantity)

Preparation :

Heat mica red hot on a pan and drop in cow's urine. Repeat this treatment seven times. Pound the mica now and bundle up in a gunny bag with paddy grains. Soak the bundle in sour kanjee for a few hours and extract fine particles of mica by crushing and squeezing the bag with hands. Collect all the fine particles of mica by settling the liquid. Dry this and then grind for a day with Adhatoda leaf juice and calcine. Do this 7 times. Similarly treat it then with juice of amarantus tricolor, for 7 times. Do the same, using liquid 7 for 3 times and with liquid 8 for 10 times. Now the mica has been calcined 30 times and has become a fine lustreless powder.

(For 12½ kg. of processed mica cakes, 400 cowdung cakes are enough. Sometimes 10 calcinations with each of 5, 6 and banyan root juice are done).

Action and Uses :

Restorative, antidiabetic, haematinic, vitaliser and promotes immunity. Used in diabetes mellitus as well

as insipidus. Employed in the treatment of chronic fevers, anaemia and debility.

Dose :

100 mg. to 200 mg. Twice or thrice daily with honey.

179. ABHRAKHA BHASMA

(One hundred times calcined)

(I.M.P.C.P.)

Drugs required :

1. Purified mica powder (quantity to be calcined)
2. Juice of wild tobacco plant (some quantity)
3. Juice of *Eclipta prostrata*
4. Juice of prickly mexican poppy
5. Negundo leaf juice
6. Indian hemp leaves juice
7. Asparagus root juice
8. *Adhatoda* leaf juice
9. Ash gourd juice
10. *Amarantus viridis* juice
11. Holy basil juice
12. *Picrorhiza* decoction
13. *Calotropis latex*
14. Black vetiver decoction
15. Juice of *calotropis* plant
16. Emblic myrobalan juice
17. Decoction of lead wort root
18. Indian globe flower juice
19. *Sirissa* bark decoction
20. *Tinospora* decoction

21. Banyan aerial root decoction
22. Raisin decoction
23. Decoction of *Ipomoea digitata* tuber
24. Aloe juice
25. Indian night shade juice
26. Decoction of negro coffee leaves
27. Indian penny wort juice
28. Juice of lotus rhizome
29. Decoction of madder
30. Decoction of three myrobalans
31. Decoction of gum arabic bark
32. Decoction of arjun bark
33. Decoction of nut grass tubers
34. Withania root decoction

Preparation :

Grind purified mica with wild tobacco juice for a day and then calcine. Do this grinding and calcination two more times. So the mica, gets three days grinding and three calcinations. Give the mica, the same treatment with all the 33 liquids. By this time, the mica gets 99 calcination. Finally, grind it with decoction of three myrobalans for a day and calcine, so that it gets 100 times calcined. By this time the particles of mica become ultra fine and do not have the property of glistening any more.

Action and Uses :

Restorative. Antidiabetic, haematinic, vitaliser and promotes disease resistance. Used in diabetes mellitus and insipidus, emaciation, anaemia, chronic fevers and debility.

Dose :

100 mg. to 200 mg. With honey or ghee. Twice or thrice daily

180. EKAGUNA SINDOORA
(Bhavaprakashika : Poornakhanda)

Drugs required :

	part
1. Purified mercury	.. 1
2. Purified sulfur	.. 1
3. Juice of cotton plant flowers (sufficient quantity)	
4. Juice of aloes (sufficient quantity)	

Preparation :

Grind mercury and sulfur to prepare the black sulfide of fine consistency. Then grind with the addition of 3. Next grind with 4. Dry the product and powder. Make sublimate by the sand bath process. The process of sublimation should be spread over three days.

Action and Uses :

Vitaliser, appetiser. Given in fevers. Used in weakness and cough in children with the powder of three pungents and withania roots with milk. It is also made into pills for easy use by adding an equal quantity of the powder of three pungents and grinding with the juice of eclipta prostrata.

Dose :

100 to 200 mg. Twice or thrice daily.

181. HINGULOTHA RASA SINDOORA (I.M.P.C.P.)

Drugs required :

	part
1. Purified cinnabar	1
2. Purified sulfur	1

Preparation :

Grind cinnabar with sulfur. Then dry and prepare sublimate by the sand bath process. This process should be spread over 3 days.

Action and Uses :

Vitaliser, and antisyphilitic. Given with powder of three pungents and honey, it is useful in cases of chronic fevers. In syphilis it is given with the powder of china root. As a tonic and restorative, it is given with nagakeshar powder, three pungents powder and sugar.

Dose :

100 to 200 mg. Thrice daily.

182. JASADA BHASMA (Ayurveda vignana : 1st part)

Drugs required :

1. Zinc (quantity to be calcined)
- *2. Lime water (cnunam water) (sufficient quantity)
- *3. Negundo leaf juice (sufficient quantity)
4. Powder of turmeric (Two parts by weight of zinc)

* Any one of the two.

5. Powder of ajowan seeds (Two parts by weight of zinc)
6. Cumin seeds powder (Two parts by weight of zinc)
7. Powder of peepal bark (Two parts by weight of zinc)
8. Powder of dry tamarind leaves (Two parts by weight of zinc)
9. Aloe juice (sufficient quantity)
10. Lime juice (sufficient quantity)
11. Ginger juice (sufficient quantity)

Preparation :

Melt zinc and slowly pour into negundo leaf juice or lime water. Repeat this treatment seven times. Melt the metal again and add the powders one by one and keep stirring with an iron wire. When the powders are all consumed the zinc will become powdery. Grind this powder with aloe juice and dry. Calcine the product. Do this grinding and calcination five times. Similarly treat it then with lime juice and calcine five times. Do the same thing with ginger juice also. Collect the contents after the fifteenth calcination and keep in bottle. (Sometimes lime juice only is used for all calcinations)

Action and Uses :

Haematinic, appetiser, tonic, antimicrobial, cholagogue and anthelmintic. Used in liver and spleen enlargements, metabolic disorders, diabetes, anaemia, eye diseases and respiratory diseases with suitable adjuvants depending upon the disease and condition.

Dose :

100 to 200 mg. Twice daily.

183. KANTHA BHASMA

(Rasaratna Samuchaya : Poornakanda)

Drugs required :

1. Lead stone (Magnetic ore or iron) (quantity to be calcined)
2. Lime juice (sufficient quantity)
3. Sour kanjee (sufficient quantity)
4. Sour butter milk
5. Cow's urine (sufficient quantity)
6. Decoction of three myrobalans (sufficient quantity)
7. Cinnabar (equal to weight of lead stone)

Preparation :

Powder the ore and grind for a day with each of the first three liquids. Dry it and add equal quantity of cinnabar. Grind the mixture for a day with cow's urine, dry and calcine, adding 1/20 parts by weight of fresh cinnabar. Repeat grinding the product obtained after the tenth calcination with myrobalan decoction and calcine. Do this ten times. Similarly grind and calcine using lime juice and sour kanjee and calcine ten times with each, each time adding 1/20 parts by weight of cinnabar. After the total of 40 times of calcination take the medicine. The calx is dark purple.

(Some physicians calcine the ore after grinding it just with lime juice. This is repeated 10 times. 400 cowdung cakes are sufficient to calcine 22½ kg. of material).

Action and Uses :

Haematinic, restorative.

Used in oedema with decoction of three pungents, nardus root, false calumba, and hog weed. (Each 12 gms boiled in 500 ml. water and reduced to $\frac{1}{2}$).

In p^hhisis, anaemia and jaundice it is given with suitable adjuvants.

Dose :

200 to 400 mg. Twice a day.

184. KARPOORA SILAJATHU BHASMA (I.M.P.C.P.)

Drugs required :

1. White silajat or white asphalt * (quantity to be calcined)
2. Rice wash (sufficient quantity)
3. Aloe juice (sufficient quantity)

Preparation :

Wash white silajat in rice wash and then in hot water. Then grind into fine paste with Aloe juice and make small cakes. When dry, calcine. (For 22½ kg. of cakes, 1500 cowdung cakes are required. Sometimes, the washed pieces are put into a pot with aloe juice and calcined).

Action and Uses :

Diuretic and sedative of the urinary system. Useful in the treatment of cases of dysurea, urethritis, cystitis,

* This occurs in commerce as white, somewhat transparent, lamellated, oily, brittle flakes.

and gonorrhoea. In gonorrhoea it is given with juice of aloes, phyllanthus niruri and some sugar. In other cases it is given with sugar and butter or ghee.

Dose :

About 200 mg. to 500 mg. Twice or thrice daily.

185. KASEESA BHASMA
(I.M.P.C.P.)

Drugs required :

1. Green vitreol (quantity to be calcined)
2. Lime juice (sufficient quantity)

Preparation :

Soak green vitreol in lime juice for a day. Then grind it with lime juice, into a fine paste and dry. Then calcine using an earthen crucible. Use 40 dung cakes for 250 gms. material. If necessary calcine once more.

Action and Uses :

Haematinic, appetiser and antiinfective. Used in the treatment of liver and spleen enlargements. Useful in the treatment of anemia.

Dose :

200 to 500 mg. Twice daily as directed.

136. LOHA BHASMA**(Rasarathna samuchaya : Poornakanda)****Drugs required :**

1. Iron filings (quantity to be calcined)
2. Sesame oil (sufficient quantity)
3. Aloe juice (sufficient quantity)

Preparation :

Fry the iron filings in some quantity of sesame oil until the oil is consumed and the filings become red hot. Repeat this process 7 times. (Do not pour oil into the hot vessel. The oil may spurt and cause burns or it may result in fire accident also). Grind the treated filings for a day with Aloe juice and calcine using dung cakes. Repeat grinding and calcination ten to twenty times.

(For 22½ kg. of material 400 cow dung cakes are required. Calx dark purple).

Action and uses :

Haematinic. Used in anemic conditions and in bloodlessness caused by dysentery etc. It is useful in oedema and jaundice also.

Dose :

100 to 300 mg. twice daily. To be given with suitable adjuvants or honey.

187. LOHA SOWVEERA
(I.M.P.C.P.)

Drugs required :

	part
1. Purified iron filings	1
2. Mercuric chloride	1
3. Aloe juice (sufficient quantity)	

Preparation :

Grind 1 and 2 with 3 to fine consistency. Dry and calcine in a capsule using moderate fire for three hours and intense fire for three hours. Collect the contents.

Action and uses :

Appetiser, haematinic and nervine tonic. Used in the treatment of paralysis, hemiplegia, nervous disorders oedema and anaemia. It is given with Sithopaladi choorna.

Dose :

100 to 300 mg. Twice a day.

188. MANDOORA BHASMA
(I.M.P.C.P.)

Drugs required :

1. Dross iron (quantity to be calcined)
2. Cow's urine (sufficient quantity)
3. Eclipta prostrata juice (sufficient quantity)

Preparation :

Heat dross iron and put into cow's urine when it is red hot. Treat the material similarly 7 times. Then

grind it with the juice into a fine paste. Dry it and calcine in earthen capsule. Repeat this 10 times. Calx dark purple.

Action and uses :

Haematinic. Used in cases of anemia, oedema and jaundice. The medicine is usually given with Gokshuradi choorna, Thriphala choorna and juice or decoction of emblic myrobalans.

Dose :

100 to 200 mg. Twice daily as directed.

189. MAKHARADHWAJA SINDOORA
(Bhaishajyaratnavali : Vejeekaranadhikara)

Drugs required :

	parts
1. Gold leaves ..	1
2. Purified mercury ..	8
3. Purified sulfur ..	24
4. Juice of red cotton plant (sufficient quantity)	
5. Juice of aloes (sufficient quantity)	

Preparation :

First prepare an amal'gam of gold by grinding gold with mercury. Add to this amalgam the quantity of sulfur and grind for six days. Continue grinding with the addition of 4 for three days and with 5 for three days. Dry the material. Subject it to sublimation in a glass flask on a sandbath. The heating shou'd be spread over three days, first applying mild fire and gradually

intensifying it. Remove the set up as soon as the process of sublimation is over. Cool the flask and collect the material formed as sublimate as well as the amorphous gold at the bottom.

Action and uses :

Tonic, aphrodisiac, and antimicrobial. Makharadhwaja is seldom given alone. It is mixed with adjuvants. In indigestion and diarrhoea, it is given with powder of bael fruit pulp. In cases of fever it is given with the juices of ginger, betle leaves and sacred basil leaves. In heart diseases it is combined with musk. In the absence of any adjuvant, honey may be used. The medicine, when taken regularly is believed to promote longevity. It is commonly used in debilitating conditions and in convalescent patients after acute illness. In failing circulation and in cardiac asthenia, makharadhwaja is considered a sovereign remedy. Recent investigations have shown its stimulant effect on the tissues. It is a definite cardiac stimulant. It is capable of giving good results particularly in those cases when there is visceroptosis and atonic condition of the gastro intestinal tract. As an intestinal antiseptic also it is said to be of great utility and is supposed to relieve the gaseous distension of bowels due to fermentation.

If taken with betle leaves and a cup of milk at bed time, it works as a good aphrodisiac and tonic.

Dose :

100 to 200 mg. Twice daily as directed.

190. MOWKTHIKA BHASMA
(I.M.P.C.P.)

Drugs required :

1. Pearls (quantity to be calcined)
2. Decoction of linseed (sufficient quantity)
3. Cow's milk (or rose water) (sufficient quantity)

Preparation :

Suspend the pearls bundled up in a cloth and steam with the decoction of linseed. (Some people do not give this treatment and simply omit it). Grind the pearls in No. 3 and prepare cakes when the ground product is very fine. Dry the cakes and calcine using an earthen crucible and 50 dung cakes. (Some people simply use the powder without calcining. Usually the cheaper process of grinding with rose water is followed).

Action and uses :

Vitaliser, and expectorant. Used in coughs and bronchitis, wasting diseases and spermatorrhoea, and pthisis. In pthisis it is used with the calx of gold, corals, Makharathwaja sindoora, bamboo manna, tinospora starch and honey.

Dose :

50 to 100 mg. Twice or thrice daily.

191. NAVAGRAHI SINDOORA
(I.M.P.C.P.)

Drugs required :

	part
1. Purified mercury ..	1
2. Purified sulfur ..	1
3. Purified native calamine ..	1
4. Purified cinnabar ..	1
5. Purified yellow orpiment ..	1
6. Purified yellow orpiment (flake variety) .	1
7. Purified copper sulfate ..	1
8. Purified arsenic penta sulfide ..	1
9. Juice of bitter gourd leaves (sufficient quantity) ..	1

Preparation :

First grind mercury and sulfur and prepare the black mass. Then add number 8 and grind until the mixture becomes homogenous. Then add the rest of the drugs and grind with the addition of bitter gourd leaf juice for two days. Dry the material and subject to the sandbath treatment. Collect the sublimate when the formation is completed.

Action and uses :

Stimulant, antitoxic, antimicrobial and antisyphilitic. Used in toxæmic states, purpura, septicaemia and syphilitic conditions.

Dose :

100 to 200 mg. Twice daily.

192. NAGA BHASMA
(I.M.P.C.P.)

Drugs required :

1. Lead (quantity to be calcined)
2. Negundo leaf juice (or sesame oil) (sufficient quantity)
3. Tamarind bark ($\frac{1}{2}$ by wt. of lead) (sufficient quantity)
4. Peepal tree bark ($\frac{1}{2}$ by wt. of lead) (sufficient quantity)
5. Arsenic realger ($\frac{1}{8}$ by wt. of lead) (sufficient quantity)
6. Aloe juice (sufficient quantity)

Preparation :

Keep a narrow mouthed vessel half filled with the juice of negundo leaves. Heat the metal in an iron spoon or similar container and cautiously pour it into the vessel taking care to protect yourself in case the liquid splashes out with the metal. Repeat this treatment three to seven times. Again melt the treated metal and add to it powders of tamarind bark little by little until the lead becomes powdery. Then use peepal bark. To this product add an equal quantity of arsenic realger and grind with the addition of Aloe juice until a fine mass is obtained. Dry this and calcine as usual in an earthen crucible. Repeat calcination ten times or until a satisfactory product is obtained. (Some people use sesame oil for purifying lead).

Action and uses :

Vitaliser and appetiser. Used in pthisis, jaundice, anaemia, urinary disorders like dysurea and anurea.

diabetes and abdominal colic. It is usually given with honey or other vehicle.

Dose :

100 to 200 mg. Twice daily.

193. POORNA CHANDRODAYA
(I.M.P.C.P.)

Drugs required :

	parts
1. Gold leaves	1
2. Purified mercury	8
3. Purified sulfur	16
4. Fresh juice of aloe (some quantity)	
5. Juice of red cotton flowers (some quantity)	
6. Camphor pure ($\frac{1}{8}$ by wt. of the sublimate)	
7. Nut meg ($\frac{1}{4}$ by wt. of the sublimate)	
8. Cloves ($\frac{1}{4}$ by wt. of the sublimate)	
9. Long pepper ($\frac{1}{4}$ by wt. of the sub imate)	
10. Musk ($\frac{1}{16}$ by wt. of the sublimate)	

Preparation :

Grind mercury and gold for three days and then add sulfur and grind for three more days. Then grind for three days adding aloe juice and for a further period of three with the juice of cotton flowers. Dry the material and prepare the sublimate by the sand bath process which should be spread over three days. Take the sublimate and the gold sediment and grind with camphor, nutmeg, cloves long pepper and musk to suitable consistency and make 250 mg. pills. (Some people use the sublimate alone without adding 6 to 10.)

Action and uses :

Aphorodisiac. Useful in sexual neurasthenia, neuritis, nervous debility, tuberculosis, diabetes and emaciating diseases.

Dose :

50 to 100 mg. Twice daily. (If the medicine is not made into tablets and not mixed with 6 to 10, 50 mg. of the powder of sublimate will do.)

194. PRAVALA BHASMA (I.M.P.C.P.)

Drugs required :

1. Corals (quantity to be calcined)
2. Lime juice (sufficient quantity)
3. Rabbit's blood (sufficient quantity)

Preparation :

Soak pieces of corals in lime juice for a day and clean. Put in crucible and submerge with blood. Calcine. (For 250 gms. of corals, one rabbit, 100 cow dung cakes and a crucible of about 500 ml. capacity are required.)

Action and uses :

Vitaliser and haemostatic. Used in pthisis, coughs and bronchitis. In pthisis, it is given with Sithophaladi choorna.

In haemoptysis it is given with laksha choorna. In ordinary coughs it is given with bet'e leaf juice. In difficulty in breathing due to phlegm in the respiratory tract it is given with juice of holybasil leaves.

Dose :

100 to 200 mg. Once or more as directed.

195. PRAVALA BHASMA (Superior)
(I.M.P.C.P.)

This type is prepared with superior quality corals of the slender type where as the former is prepared with ordinary rocky corals. The process is the same and properties are claimed to be better. Usually, Adhatoda leaf juice is used instead of Rabbit's blood. Calcination is repeated 4 times.

(1000 cow dung cakes are required for 11.5 kg. of corals.)

196. RAJATHA CHANDRODAYA
(I.M.P.C.P.)

Drugs required :

	parts
1. Purified silver leaves	.. 1
2. Purified mercury	.. 8
3. Purified sulfur	.. 16
4. Juice of red cotton flowers (sufficient quantity)	
5. Aloes juice (sufficient quantity)	

Preparation :

Let mercury consume the silver and form an amalgam. Add sulfur to this amalgam and grind for three days and then continue grinding with the two juices, for

5 days with each. Then subject the material to the sand bath process after drying. Heating is spread over 3 days with gradual increase in heat. When the process of sublimation is complete, cool the set up and collect the contents and powder.

Action and uses :

Aphrodisiac, appetiser and haematonic. This medicine has cooling properties and is used mostly in combination with Poornachandrodaya.

Dose :

100 to 200 mg. Twice or thrice daily.

197. RAJATHA BHASMA
(I.M.P.C.P.)

Drugs required :

1. Fine silver leaves (quantity to be calcined)
2. Mercury ($\frac{1}{8}$ by wt. of silver)
3. Juice of Daemia extensa (sufficient quantity)

Preparation :

Prepare an amalgam of silver with $\frac{1}{8}$ parts of mercury and grind it with the juice of Daemia extensa and then dry and calcine. Then without adding more mercury, the product is ground only with juice and the process of calcination is repeated 6 more times.

(During 3rd grinding $\frac{1}{8}$ by wt. of egg shell is added.)

Action and uses :

Aphrodisiac, haematinic, sedative and expectorant. Useful in the treatment of anemia, oedema, jaundice, coughs and bronchitis. This medicine is also useful in spermatorrhoea.

Dose :

100 to 200 mg. Twice or thrice daily with honey.

198. SHANKHA BHASMA (I.M.P.C.P.)

Drugs required :

1. Conch shells (quantity to be calcined)
2. Lime juice (sufficient quantity)
3. Lotus leaf juice (sufficient quantity)

Preparation :

Break the conch shells into pieces and soak for a day in lime juice and then wash them with hot water to remove the dirt. Grind the cleansed pieces with lime juice and dry the product. Calcine the material with the juices, using an earthen crucible. If the powder obtained after calcination is not of satisfactory quality repeat calcination, once more. This imparts a fine texture to the product.

(1000 cow dung cakes are required for 11.5 kg. of conch pieces).

Action and uses :

Appetiser and digestive. Relieves colic. Useful in the treatment of liver and spleen enlargements when given with Varata bhasma add Tankana bhasma

In gastric and duodenal ulcers it is administered with a powder containing, aconian seeds, rock salt, potassium carbonate and lime juice.

Dose :

100 to 200 mg. Twice or thrice daily with butter or as directed.

199. SHATGUNA SINDOORA

(Rasayoga rathnakara)

Drugs required :

	parts
1. Purified mercury ..	1
2. Purified sulfur ..	8
3. Juice of Red cotton flowers (some quantity)	
4. Aloe juice (some quantity)	

Preparation :

Grind mercury and sulfur into a fine black mass and continue grinding until a fine powder results. Grinding should be continued for three days adding the juices. Make sublimate after drying by the glass flask-sand bath process. The process of heating is usually spread over three days, gradually increasing the intensity of fire. Take the final product when the formation of sublimate is completed. If the product is not of satisfactory quality, add an equal amount of sulfur and grind and repeat the process.

Action and uses :

Antiperiodic, haematinic, and vitaliser. Used in the treatment of anemia, jaundice, fever, coughs and bronchitis. It is given with the powder of three pungents in fever. In cases of coughs, it is given with a powder of cloves, bamboo manna, and tinospora starch. In cases of emaciation and bodily heat, it is given with milk and also powders of witharia roots, tinospora starch, long pepper and bamboo manna.

Dose :

100 to 200 mg. Twice or thrice daily.

200. SHADGUNA BALIJARITHA SIDDHA MAKHARADHWAJA

(Bhaishajya rathnavali : Jwaradhikara)

Drugs required :

	parts
1. Purified gold leaves	1
2. Purified mercury	8
3. Purified sulfur	48
4. Juice of red cotton flowers (some quantity)	
5. Juice of aloes (some quantity)	

Preparation :

Grind gold and mercury for six days. Add sulfur and grind for six more days. Then continue grinding for six days with each of the juices mentioned above. Dry the product and prepare sub'imate. When the process of the formation of the sublimate is completed, cool the set up and collect the contents of the flask (sub'imate as well as gold sediment). Powder it.

(This medicine may be made into pills by grinding it with the following :—

	part
Medicine	1
Camphor	1
Long pepper	1
Cloves	1
Nutmeg	1
Black pepper	1
Musk	1/16

grind all together and make pills of 120 mg. weight)

Action and uses :

Aphrodisiac, and nervine tonic. Used in loss of weight, emaciation, anemia, nervous debility, neurasthenia and loss of sexual vigor.

Dose :

In powder from 100 to 200 mg. per dose. Two or three doses per day. In pill form 2 to 3 pills per dose. Two or three times per day.

201. ERINGA BHASMA
(I.M.P.C.P.)

Drugs required :

1. Cleaned * pieces of deer antlers (quantity to be calcined)
2. Agati leaf juice (some quantity)

Preparation :

First burn the antlers on dung cakes. Then grind them with the juice. Dry and calcine in crucible. A fine white impalpable powder without any grit should be obtained.

(For 11.50 kgs. of material 1000 cow dung cakes are required).

(* For cleaning, boil in some washing soda and wash with water).

Action and uses :

Expectorant, stimulant, cardiac tonic. Used in palpitation, and weakness of heart. In these cases it is recommended to be used with Makharadhwaja.

In coughs and bronchitis, it is given with a powder of lesser galangal. In urinary disorders and colored urine, it is given with butter and sugar. In gonorrhoea, it is given with sugar.

Dose :

100 mg. or 200 mg. Twice or thrice daily.

202. SUKTHI BHASMA

(I.M.P.C.F.)

1. Pearl oyster shells (quantity to be calcined)
2. Lime juice (sufficient quantity)
3. Negundo juice (sufficient quantity)
4. Adhatoda juice (sufficient quantity)
5. Black musale juice (sufficient quantity)

Preparation :

Break the oyster shells and soak in lime juice for a day and then wash in hot water. Put bits in crucible pour negundo juice to submerge them, seal and calcine

Use the juices of Adhatoda leaves and black musale roots for second, third and fourth calcinations. The product is pure white.

(1000 dung cakes are required for 11.5 kg. of material).

Action and uses :

Expectorant, cardiactonic, appetiser and digestive.

Used in coughs and bronchitis with juice of betle leaves. Used in indigestion and abdominal pains and sensation of pain within the chest. In chest pains it is given with the calx of the antlers of deer.

Dose :

100 to 500 mg. Twice or thrice daily as directed or with honey.

203. SURAKSHARA KASEESA
(I.M.P.C.P.)

Drugs required :

	part
1. Sa't petre (Potassium nitrate) ..	1
2. Green vitreol (Ferrous sulfate) ..	1
3. Lime juice (sufficient quantity)	

Preparation :

Soak both the salts in sufficient quantity of lime juice for a day. (The quantity of lime juice should be just sufficient to submerge the salt). Then grind with the addition of lime juice and make small cakes. Dry the cakes and then calcine using 300 dung cakes. If the material is not satisfactorily calcined repeat calcination until the product is upto the standard. (For 3 kgs. of total material, 600 cow dung cakes will suffice).

Sometimes, even without grinding calcination is done successfully.

Action and uses :

Diuretic. Expels toxic substances from the system and hence an antidote to toxins. Useful also in the treatment of abdominal ailments, liver and spleen disorders, dysuria, and anuria. It is given with powders of rhubarb, cloves black salt, long pepper, and chebulic myrobalans. To bring about diuresis, this medicine is given with some honey.

Dose :

200 to 500 mg. Once or more if necessary.

204. SWARNA MAKSHIKA BHASMA

(Rasa Rathna samuchaya : Pcorna kanda)

Drugs required :

1. Copper pyrites (quantity to be calcined)
2. Decoction of three myrobalans (sufficient quantity)
3. Lime juice (sufficient quantity)
4. Citron juice (sufficient quantity)
5. Sulfur ($\frac{1}{4}$ by wt. of copper pyrites)
6. Rock salt ($\frac{1}{4}$ by wt. of copper pyrites)

Preparation :

Break copper pyrites into pieces. Fry the pieces on an iron pan until red hot and drop into the decoction. Heat them again and drop in lime juice. Wash in water. Powder the pieces now and add 5 and 6. Grind adding juices until the material becomes fine, and then dry.

Calcine the dried material. Repeat calcination twelve times. The product is deep purple in color.

(400 dung cakes will suffice for 12 kg. material).

Action and uses :

Appetiser, haematinic, and restorative. Used in anaemia, jaundice and stomatitis with ca'x of mica, ca'x of lead stone, bamboo manna, Sithophaladi choorna and honey. In stomatitis it is given with Swarnavanga and juice of wood, apple leaves.

Dose :

200 to 500 mg. Twice or thrice daily.

205. SWARNA BHASMA (I.M.P.C.P.)

Drugs required :

1. Gold (Beaten into leaves) (quantity to be calcined)
2. Sesame oil (some quantity)
3. Sour butter milk (some quantity)
4. Cow's urine (some quantity)
5. Decoction of horse gram (some quantity)
6. Calomel (some quantity)
7. Lime juice (some quantity)
8. Sulfur purified (some quantity)

Preparation :

Grind calomel with some lime juice to make a paste. Heat the gold leaves and plunge in sesame oil. Repeat

this treatment seven times. Similarly treat the gold with sour butter milk, cow's urine and horse gram decoction. Smear on the treated plates or leaves the calomel paste. Dry and keep them in the earthen crucible along with sulfur and seal. Dry the set up and calcine. Repeat calcination 8 times or until a satisfactory powdery product is obtained, each time adding some quantity of calomel powder.

(Another method :—gold is ground with 1/10 parts of a salt prepared from a plant called "Manja' kadambu" in tamil, with the addition of juice of *Euphorbia rosea*, dried and calcined twice or until the product is a lustreless yellow brown powder).

Action and uses :

Restorative and aphrodisiac. Used in tuberculosis and other debilitating diseases. Given as a tonic in combination with powder of cowhage seeds, withania roots and some musk.

Dose :

50 to 100 mg. Twice or thrice daily.

(The calcination could be done in another way also. The gold leaves are smeared with a paste of calomel and lime juice and heated red hot. This treatment is given seven times. The treated leaves are put into the crucible with a powder of *Amarantus spinosus*, sealed and calcined ten times repeatedly).

206. TAMRA VANGA (I.M.P.C.P.)

Drugs required :

	part
1. Purified copper leaves	1
2. Purified tin foils	1
3. Powder of egg shells	2
4. Lime juice (sufficient quantity)	

Preparation :

Place the tin foils on copper leaves and roll into a round'le and calcine in an earthen crucible with 100 dung cakes. Take the resultant mass from the crucible and add to it the powder of egg shells. Grind the mixture with the addition of lime juice and dry. Then calcine in a crucible as usual. Repeat the process of calcination upto 10 times. Calx dirty golden yellow colour.

(Usually tin is heated to melt and then 1 and 3 are added and heated with mixing to obtain a powdery product. Then it is ground with lime juice and calcined For 1 kg. of metals 150 dung cakes).

Action and uses :

Expectorant and digestive. Used in coughs and bronchitis with powder of three peppers, cloves and honey. Diuretic useful in painful urination and related conditions. Useful also in diseases of the skin.

Dose :

100 to 200 mg. Twice or thrice daily.

207. TAMRA BHASMA

(Rasarathna samuchaya : Poornakanda)

Drugs required :

1. Rock salt (some quantity)
2. Lime juice (sufficient quantity)
3. Cow's urine (some quantity)
4. Prepared black sulfide of mercury (some quantity)
5. Copper leaves (quantity to be calcined)
6. Alangium Root powder (sufficient quantity)

Preparation :

Grind some rock salt with lime juice into paste and smear on copper leaves. Heat copper leaves thus smeared, until red hot and plunge into cow's urine. Repeat this eight times. Heat them and powder. Add $\frac{1}{4}$ by weight of rock salt, mix and soak in lime juice for 7 days. Ther. recover copper. Wash and grind with $\frac{1}{4}$ by weight of black sulfide of mercury, and a decoction of 8. Make tablets and dry. Put tablets in crucible, and cover on all sides with 6. close and seal. Calcine 8 to 10 times. Calx almost black in color.

(For 5.500 kgs. of tablets, 400 dung cakes will suffice)

Action and uses :

Expectorant, digestive and haematinic. Used in the treatment of anemia, jaundice, oedema and abdominal disorders. In coughs and bronchitis it is given with the powder of three pungents. In complaints of the alimentary tract, it is given with Bhaskara lavana.

Dose :

100 to 200 mg. Twice daily.

208. THALAKA BHASMA (I.M.P.C.P.)

Drugs required :

1. Yellow orpiment (flakes) purified—quantity to be calcined
2. Bitter gourd leaf juice (sufficient quantity)
3. Ash of Bengal kino bark (some quantity)

Preparation :

Grind orpiment with the juice of bitter gourd leaves. Dry the material. Calcine in an earthen crucible after mixing it with the ash of Bengal kino bark. Calx yellowish with blackish green tint.

Action and uses :

Expectorant, antiperiodic, blood purifier, antitoxic and antimicrobial. Used in leprosy, skin diseases and fistula in ano with powders of margosa root, Indian beech tree root, embelia fruits, calx of asphalt and sugar.

Dose :

100 to 200 mg. Twice daily with honey.

209. VARATIKA BHASMA (I.M.P.C.P.)

Drugs required :

1. Cowrie shells (some quantity)
2. Lime juice (sufficient quantity)

Preparation :

Wash cowries in water and then soak in lime juice and expose to sun light. The juice should be totally

submerging the shells. During exposure to sun, occasionally shake the container so that the cowries get uniform treatment with lime juice. Take the shells when the liquid is dried up and grind with lime juice to fine consistency. Dry the mass and subject to calcination. If the product is not satisfactorily calcined, repeat the calcination until a satisfactory product is obtained.

(Usually, cowries are put in crucible with lime juice and twice calcined. For 11.5 kg. of material 1000 dung cakes are required).

Action and uses :

Expectorant, sedative, digestive and appetizer. Useful in coughs, bronchitis, phthisis and other wasting diseases. Useful also in the treatment of irritation of the gastrointestinal tract, abdominal colic, liver and spleen enlargement when given with Bharkara lavana choorna.

In earache, some powder is put into the ear and a few drops of lime juice is instilled. When the effervescence stops, the auditory canal is cleaned and some oil is instilled.

Dose :

200 to 400 mg. Twice or thrice daily.

210. VANGA BHASMA (I.M.P.C.P.)

Drugs required :

	part
1. Tin	1
2. Mahua oil (sufficient quantity)	..
3. Powder of tamarind bark	1

	part
4. Powder of peepal tree bark	.. 1
5. Powder of prickly chaff flower	.. 1
6. Powder of tanner's cassia bark	.. 1
7. Aloe juice (sufficient quantity)	

Preparation :

Melt tin and pour into a pot half filled with negundo juice and turmeric powder. This process has to be done with great care, so that the material does not splash out and harm the person. A pot with a very narrow mouth serves this purpose very well. Repeat the process 7 times with the same tin and the same oil. Then melt the tin in a large iron spoon and add the powders (4 to 7) little by little and stir, with a piece of Banyan aerial root until the metal becomes a powder and all the drug powders are consumed.

Grind the product with aloe juice, make small disks and dry. Put in crucible, seal and calcine. Repeat grinding and calcination 10 times. The complete process requires 1500 dung cakes for 11.5 kg. of material. The resulting calx is pure white in color.

Action and uses :

Diuretic, expectorant, tonic, sedative and anti-microbial.

Used in coughs and bronchitis with powder of three pungents, lesser glangal and cloves and some honey.

In diabetes mellitus and insipidus, it is given with powders of nut meg, mace, saffron calx of silver, tanners' cassia flower, bamboo manna, tinospora starch and cardamoms.

In urethritis, gonorrhoea and cystitis, it is given with powders of cubebs, cumin seeds, Indian coral tree bark, sugar and calx of asphalt.

Dose :

100 to 200 mg. Twice or thrice daily.

211. VAIKRANTHA BHASMA
(Rasarathna samuchaya : Poorvakanda)

Drugs required :

1. Vaikrant stones (quantity)
2. Lime juice (sufficient quantity)
3. Horse's urine (some quantity)

Preparation :

First purify the stones by heating and plunging in horse's urine. Repeat this process seven times.

Then grind the stones in lime juice into a fine pulp and dry. Calcine the dried material in an earthen crucible. Repeat this five times. (For 500 gms. of material, 100 cow dung cakes will suffice).

Action and uses :

Vitaliser and cardio-tonic. Used in the palpitation and the weakness of heart. Useful also in pthis and wasting diseases. This medicine is usually given with other tonics.

Dose :

100 to 200 mg. Twice or thrice daily with butter or honey.

SECTION XV

DHATU & RASA OUSHADHA

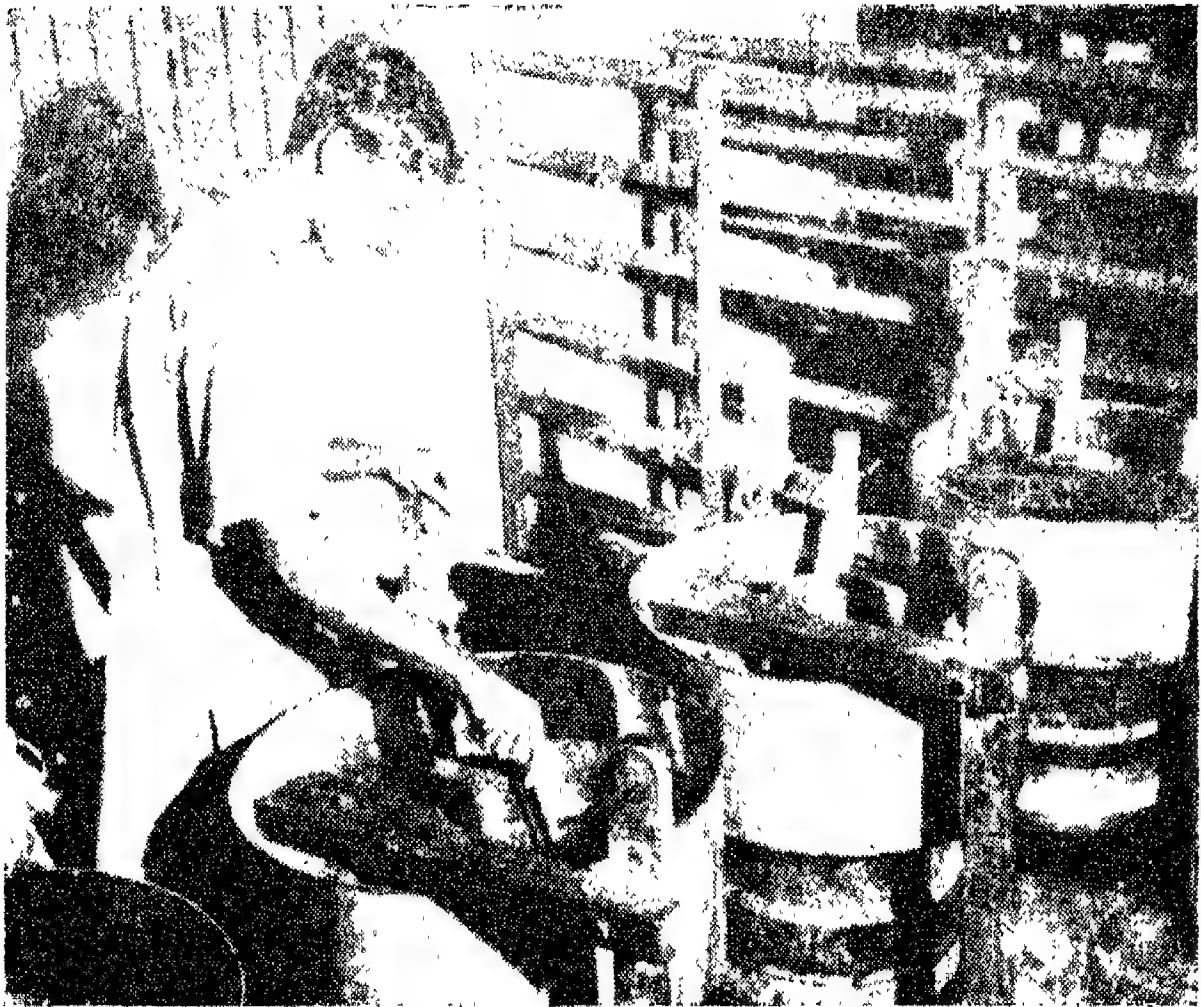
Concept and Terminology :

Rasa oushadha are medicines which usually contain mercury, which is present in a chemically combined state with the other ingredients. Rasa oushadha means, mercurial medicines which denotes that mercury dominates the group of preparations. These medicines are also called as khajja'i preparations, because, mercury is first made to combine with sulfur to form a black sulfide in these preparations.

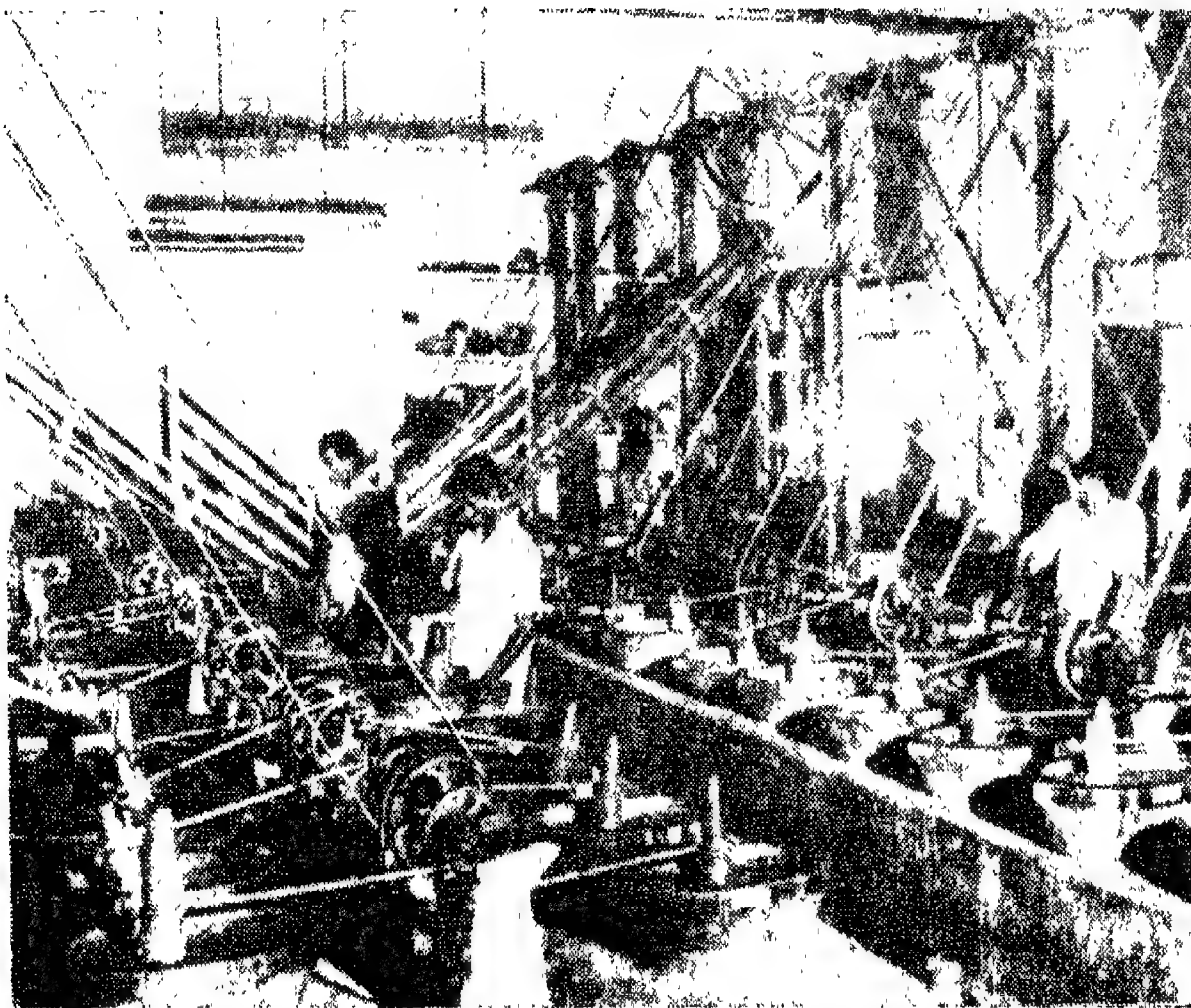
Preparation :

Equipment required :

1. Drugs necessary for the preparation in a purified state, made ready for use.
2. Mortar and pestle.
3. Trays and dishes for handling powders and pastes.
4. Vessels for the preparation and handling of decoctions and juices of drugs. (In large scale manufacture, the grinding of khajja'i and similar ingredients of rasa oushadha, is done by electrically operated mortars. Pills or tablets are made with the help of machines. They are counted, packed and sealed by electronic appliances).



Grinding drugs in end runner



Levigating drugs in khalvam assembly

Principles and process of preparation :

1. All the metals, minerals, and poisonous organic drugs should be necessarily purified according to the methods prescribed in the Science of Ayurveda.

2. Wherever, in *rasa oushadha* the use of mercury and sulfur is come across, the two should be ground to form the *khajjali*. The *khajjali* is chemical'y a black sulfide of mercury. The grinding should be carried out until the mixture of mercury and sulfur is converted into a lustreless, fine impalpable powder of uniform consistency. When it is rubbed between fingers, there should be no lump or grit in it. Only after the preparation of *khajjali*, other drugs should be added.

3. The compounded drugs should be ground in a mortar for the prescribed period, with the addition of prescribed juices and/or decoctions.

4. When another metal in addition to Mercury, is to be used in the preparation of medicine, the amalgam of the metal concerned with the mercury should be prepared and to this, the sulfur should be added and the *khajjali* prepared. The metals are made into thin leaves or fine filings to facilitate easy amalgamation.

5. When a *parpati* (medicine in the form of flakes) is to be made with gold, silver or tin, the metal should be amalgamated first and then the sulfur should be added. But when *bhasma* are used, the *khajjali* is first prepared and then the *bhasma* are added to it. After this the complete powder is heated on fire for making the *parpati*.

6. If red orpiment, yellow orpiment and other materials are to be added, they should be purified according to the Ayurvedic methods and ground into a

fine powder, devoid of any glistening particles separately and added to the khajjali.

7. If green drugs are to be added, they should be made into a fine paste before being used. Vegetable drugs which require frying, are fried and powdered. Those that do not require frying are sundried and powdered.

8. If croton seeds are to be taken for use, they should be taken through the purification process and the cotyledons alone should be used in medicine.

9. When aconite or seeds of Dhatura are to be used, they should be purified and ground in lime juice before being added to other constituents of the medicine.

10. Asafoetida should be fried in ghee and powdered. This powder should be used in the preparation of all rasa oushadhas except Rajaprabhakarivati.

11. Bdellium should be purified and then ground with honey or ghee, before being used in the preparation.

12. The individual constituents should be weighed after powdering and then taken according to the formula.

The process of preparation includes two important treatments at the final stage.

- (a) A process of soaking the preparation in certain juices or decoctions. The fluid taken should be sufficient to submerge the material completely. The mixture is then allowed to dry up. This treatment of soaking is called as "Bhavana" in Sanskrit. The prescribed juices decoctions or other fluids are specified in the respective formulae.

- (b) The second process of treatment is grinding the drug for a specified period with the addition of specific juices or decoctions. The process of grinding is called 'Mar-dhana' in sanskrit.

After subjecting the medicine to such soaking and grinding processes, when the material becomes fine and soft enough to be rolled into pills between finger tips, pills are made. Some ghee is smeared on finger tips to facilitate rolling. To maintain uniformity of pill size the medicine is first rolled into long pencils of uniform thickness and then cut into bits of equal length which will give pills of required size when rolled. Some of the rasa oushada can also be made into tablets in tablet compressing machines.

Storage and usage :

Some of the Rasa oushadhas contain ingredients of poisonous nature. They should be stored in glass bottles with relevant labels indicating that they are poisonous. Rasa oushadhas keep good for any length of time.

These medicines should be administered in correct dosage and an overdose may turn out to be serious. Rasa oushadhas are generally taken with decoctions, milk, honey, ghee or water according to indications.

212. ADITHYA RASA

(Yoga Ratnakara Ajeerna Prakarana)

Drugs required :

	part
1. Purified cinnabar ..	1
3. Purified acorite ..	1
2. Purified sulfur ..	1
4. Powders of three pungents (each) ..	1
5. Powders of three myrcbalans (each) ..	1
6. Nutmeg powder ..	1
7. Powder of Cloves ..	1
8. Powder of five salts (each) ..	1
9. Some quantity of juice of lime, citron and pomogranate fruits	

Preparation :

First grind 1 and 2 well. Add 3 and grind. Later add the rest and grind. Then grind the mass with the juices of sour fruits* of the citrus, lemon, pomogranates etc. for seven days. When the consistency is attained make 100 mg. pills.

Action and uses :

Digestive, annetiser and antiperiodic. In dyspepsia and fever it is given with the decoction of dry ginger and/or black pepper.

Dose :

1 tablet. Twice or thrice a day.

* Usually only lime juice is used.

213. AGNITUNDI VATI

(Bhaishajya ratnavali : Agnimandhyadhikara)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified aconite	1
4. Ajowan fruits	1
5. Powders of three myrobalans (each)	1
6. Two alkalis (each)	1
7. Powder of lead wort root	1
8. Powder of cumin seeds	1
9. Powders of embelia fruits	1
10. Borax purified	1
11. Three salts	1
12. Powder of purified nux vomica seed	16
13. Lime juice (sufficient quantity)	

Preparation :

First prepare the amalgam with 1 and 2. Then add No. 12 and grind. Then add the other drugs one by one and continue grinding with the addition of lime juice. Continue grinding for 7 days and make 50 mg. pills.

Action and uses :

Appetiser, astringent, carminative and digestive
Used in loss of appetite, indigestion, dysentery and diarrhoea.

Dose :

$\frac{1}{2}$ to 1 tablet for children. Up to 2 tablet for adults. To be given two or three times daily.

214. ANANDABHAIRAVA RASA (Rasayoga ratnakara)

Drugs required :

	parts
1. Purified cinnabar	3
2. Purified aconite	3
3. Purified borax	3
4. Powder of dry ginger	1
5. Powder of long pepper	4
6. Powder of black pepper	4
7. Citron juice (some quantity)	
8. Lime juice (some quantity)	

Preparation :

Grind 1 with lime juice. Add 2 and grind into a fine mass. Then add the other drugs one by one and grind with the addition of citron juice. Continue grinding for a week. Prolonged grinding increases the quality of the medicine. Prepare tablets of 100 mg.

Action and uses :

Digestive, carminative, astringent and antiperiodic. It is given in fevers, dyspnoea, indigestion, fevers with pain in the body and allied conditions along with powder of three pungents, and honey or, juice of ginger, or a decoction of coriander, black pepper, Mollugo cerviana, Tinospora and cinnamon bark.

In diarrhoea and dysentery it is given with the powder of the tellicherry seeds, cinnamon and cumin seeds.

Dose :

1 to 2 table'ts. Given twice or thrice a day.

215. AROGYA VARDHANI VATI
(Rasa Rathna Samuchaya : Kushtadhikara)

Drugs required :

	part
1. Purified mercury ..	1
2. Purified sulfur ..	1
3. Calx of iron ..	1
4. Calx of mica ..	1
5. Calx of copper ..	1
6. Powder of three myrobalans (each) ..	2
7. Purified asphalt-black ..	3
8. Purified Indian bedellium ..	4
9. Powder of lead wort root ..	4
10. Picrorrhiza powder ..	18
11. Margosa leaf juice (sufficient quantity)	

Preparation :

Grind all the drugs with margosa leaf juice and make 500 mg. tablets.

Action and uses :

Blood purifier, antimicrobial, digestive, carminative, antiperiodic, haematinic and cardiac tonic.

Used in anaemia, liver and spleen enlargements, chronic skin diseases and fevers.

Dose :

1 to 2 tablets twice daily.

216. ASHTAKSHARI GUTIKA
(Ayurveda kalpadruma)

Drugs required :

	part
1. Purified cinnabar	.. 1
2. Purified opium	.. 1
3. Purified asafoetida	.. 1
4. Red sanders wood powder	.. 1
5. Sandal wood powder	.. 1
6. Nu'meg powder	.. 1
7. A'is powder	.. 1
8. Long pepper powder	.. 1
9. Dry ginger (some quantity)	
10. Cumin seeds (some quantity)	
11. Cowhage roots (or climbing nettle roots) (some quantity)	
12. Nut grass tubers (some quantity)	
13. Aiowan seeds (some quantity)	
14. Coriander seeds (some quantity)	
15. Lime juice (some quantity)	

Preparation :

Grind cinnabar with some lime juice, add opium and grind. Add asafoetida and the drugs 4 to 8 one by one and continue grinding. Grind the resultant mass with the decoctions of 9 to 14 separately, atleast for a day.

Make 100 mg. tablets.

Action and uses :

Astringent and digestive. Used in the treatment of diarrhoea and dysentery with buttermilk or honey. In flatulance it is given with a compound powder of cinnamon, cumin seeds and dry ginger.

Dose :

One to two tablets, twice or thrice daily.

217. ASHOKADHI VATI (I.M.P.C.P.)

Drugs required :

	parts
1. Concentrated extract of Ashoka bark* ..	4
2. Calx of green vitreol ..	1
3. Decoction of Ashoka bark (some quantity)	

Preparation .

Grind the drugs with the decoction and make 500 mg. tablets.

Action and uses :

Haemostatic, astringent, uterine tonic and sedative. Used in menorrhagia, metrorrhagia, amenorrhoea, and dysmenorrhoea with the decoction of curry leaf rachis, margosa leaf rachis, seeds of capsicum, acteracantha seeds, dry ginger and coriander.

Dose :

1 tablet twice daily.

* This extract is prepared in the following way :—

One part of weight of ashoka bark is boiled with 16 parts by weight of water until the decoction is reduced to $\frac{1}{2}$. The filtered decoction is then boiled until it attains a semisolid consistency and then finely powdered ashoka bark is mixed with it. Powder prepared taking $\frac{1}{2}$ by wt. of bark used to make the decoction is used. Honey is added to this extract and stored. Extracts of other drugs are also prepared in this way.

218. BALA SOORYODHAYA RASA
(Bhaishajya rathnavali : Jwara prakarana)

Drugs required :

	part		gms.
1. Purified mercury	1	..	10
2. Purified sulfur	3	..	30
3. Purified aconite	3	..	30
4. Purified asafoetida	$\frac{1}{2}$..	5
5. Calx of iron	2	..	20
6. Calx of copper	2	..	20
7. Calx of mica	5	..	50
8. Powder of black pepper	16 $\frac{1}{2}$..	165
9. Common fig tree bark (some quantity)			
10. Bark of yellow mountain ebony tree (some quantity)			
11. Cloves (some quantity)			

Preparation :

First prepare the black amalgam with sulfur and mercury. Add 3, 5, 6 & 7 a.l.a g.m.u. Then add 4 and 8 Grind into a mass and continue grinding with the addition of the decoctions of 9, 10 and 11 separately for three days in each. Make 100 mg. tablets and store. (Some people omit 10).

Action and uses :

Haematinic, diuretic, haemostatic, uterine tonic and sedative. Used in fevers with a decoction of dry ginger, coriander and black pepper. In anaemias, jaundice, liver and spleen enlargement it is given with the powders of three pungents, calx of green vitreol, and juice of *Eclipta prostrata* leaves. In haemorrhages, dysmenor-

rhoea and other uterine disorders it is given with withania root powder.

Dose :

1 to 2 tablets ; twice daily.

219. BHEDI JWARANKUSA RASA

(Basavarajeeya : Jwara Prakarana)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	2
3. Purified aconite	1
4. Purified croton seeds	6
5. Purified borax	2
6. Black pepper powder	5
7. Ginger fresh (some quantity)	
8. Indian night shade fruits (some quantity)	
(Some people do not include drug No. 3).	

Preparation :

Grind mercury and sulphur ; then add 3 to 6 and grind with juice of 7 for 3 days and juice of 8 for 3 days. Make 100 mg. pills.

Action and uses :

Antiperiodic, laxative and expectorant. Useful in the treatment of fevers accompanied with constipation or respiratory disorders.

Dose :

1 to 2 tablets with ginger juice.

220. CHATHURMUKHA RASA
(Bhaishajya ratnavali : Vatarogadhikara)

Drugs required :

	part		gm.
1. Purified mercury	1	..	10
2. Purified sulfur	1	..	10
3. Calx of iron	1	..	10
4. Calx of mica	1	..	10
5. Calx of gold	$\frac{1}{4}$..	2.5
6. Indian aloe juice (some quantity)			
7. Juice of holy basil leaves (some quantity)			
8. Juice of Indian penny wort (some quantity)			
9. Castor leaves (a few)			

(Some people do not use juices 7 & 8).

Preparation :

Grind 1 to 5 in the juices 6, 7 and 8. Keep the semi solid mass rolled in the castor leaves, in hear of grain for three days. Take and roll into 100 mg. tablets.

Action and uses :

Aphrodisiac. Restorative. Used in loss of weight, emaciation, neurasthenia, pthysis and other wasting diseases.

Dose :

100 to 200 mg. twice or thrice daily with honey or ghee.

221. CHANDRAPRABHAVATI
(Bhaishajyaratnavali : Pramehadhikara)

Drugs required :

	gms.
1. Psoralea seeds ..	10
2. Sweet flag ..	10
3. Nut grass tubers ..	10
4. Chirata ..	10
5. Himalayan cedar wood ..	10
6. Turmeric ..	10
7. Aconite ..	10
8. False calumba stem (ceylon calumba) ..	10
9. Long pepper root ..	10
10. Lead wort root ..	10
11. Turpith roots (white) ..	10
12. Croton root ..	10
13. Cinnamon leaves ..	10
14. Cinnamon bark ..	10
15. Cardamom ..	10
16. Bamboo manna ..	10
17. Coriander seeds ..	10
18. Three myrobalans each ..	10
19. Cubebs ..	10
20. Embelia fruits ..	10
21. Large long pepper ..	10
22. Three pungents each ..	10
23. Two alkalies ..	10
24. Three salts ..	10
25. Calx of copper pyrites ..	10

	gms.
26. Calx of iron	20
27. Bitumen purified (asphalt)	80
28. Indian bdellium	80
29. Sugar	40
30. Honey (some quantity)	

(Instead of honey, some people use three myrobalans decoction).

Preparation :

Grind 28 with 30 and then add 26, 25, 27 and 29 in succession adding some honey each time. Grind to mix all the ingredients well and then add fine powders of the other drugs. Continue grinding until a soft mass suitable for pill preparation is obtained. Prepare pills of 500 mg.

Action and uses :

Digestive, diuretic, expectorant, haematinic, anti-microbial and general tonic. Used in urinary disorders, calculi, anaemia, jaundice, coughs, bronchitis, skin diseases and metropathies.

Dose :

1 to 2 pills. Twice daily one hour before food.

222. DEVAKUSUMA RASAYANAM
(Valdyaka Sabda Sindu : Rasakarpooa Vidhi)

Drugs required :

	part
1. Purified calomel	1
2. Cloves powder	1
3. Sandalwood powder	1
4. Musk	1
5. Saffron	1
6. Purified sulphur	1
7. Margosa bark (some quantity)	
8. Indian beach tree bark (some quantity)	
9. Phyllanthus niruri (some quantity)	
10. Bengal kino bark (some quantity)	

Preparation :

Grind calomel and sulfur and then add the other drugs upto 6. Grind well adding the juices or decoctions of the remaining four drugs for a day in each. Make 100 mg. tablets.

Action and uses :

Antisyphilitic and blood purifier. Used in syphilis of all stages and arthritis and chronic dermal diseases.

Dose :

I to 2 tablets with Saribadyasava or Khadirarishta twice daily.

223. DHANVANTARA GUTIKA

(Sarvaroga Chikitsa Ratna : Swasa hidma chikitsa)

Drugs required :

	part	gms.
1. Dry ginger	1	10
2. Chebulic myrobalan	1	10
3. Cumin seeds	1	10
4. Chirata	1	10
5. Indian night shade root	1	10
6. Cubebs	1	10
7. Himalayan cedar wood	1	10
8. Camphor pure	1	10
9. Civet	1	10
10. Cardamom seeds	1	10
11. Cress seeds	1	10
12. Rudraksha seeds (rosary nuts)	1	10
13. Kan ^t ivenna (see glossary)	1	10
14. Nutmeg	1	10
15. Cumin seeds (some quantity)		

Preparation :

Powder all the drugs except 15. Prepare a decoction of 15. Mix the powder with the decoction and grind to consistency. And make 50 mg. tablets.

Action and uses :

Cardiac tonic and expectorant. Used in the weakness of heart, coughs, bronchitis and pneumonia.

Dose :

1 tablet to 2 tablets twice or thrice daily.

224. DUGDHA VATI

(Bhaishajyaratnavali : Sotharoga Chikitsa)

Drugs required :

	part
1. Purified aconite ..	1
2. Purified seeds of purple dhatura ..	1
3. Purified cinnabar ,	1
4. Fresh leaves of purple dhatura for extracting juice (sufficient quantity)	

Preparation :

Grind the first three drugs adding the juice of purple dhatura leaves for three and a half hours in a mortar. Roll into 100 milligrams pills or press into tablets of the same weight.

Action and uses :

Diuretic and antitoxic. Useful in oedema, anaemia and jaundice.

Dose :

1 tablet twice daily with cow's milk.

Diet restrictions :

Drink less of water. Take only rice and milk, avoiding salts.

225. GOROCHANADI GUTIKA

(With Gold)

(Sarvaroga Chikitsaratna : Sannipata Chikitsa)

Drugs required :

	part
1. Bezoar	1
2. Calx of gold	1
3. Calx of deer antlers	1
4. Calx of lead	1
5. Calx of corals	1
6. Calx of borax	1
7. Civet	1
8. Ambergris	1
9. Galena	1
10. Camphor pure	1
11. Red ochre	1
12. Rudraksha nut (rosary nuts)	1
13. Sandal wood	1
14. Sweet flag	1
15. Vetiver roots	1
16. Nut grass tubers	1
17. Larger nut grass	1
18. Three pungents (each)	1
19. Sea coconut kernal	1
20. Cress seeds	1
21. Smooth volkameria roots	1
22. Goat's horn	1
23. Stag's horn black	1
24. Stag's horn white	1
25. Ivory	1
26. Chirata	1
27. Nigella seeds	1
28. White dead nettle (Leucas flowers)	1

	part
29. Red cotton seeds	1
30. Prickly chaff flower roots	1
31. Garlic	1
32. Three myrobalans each	1
33. Jasmin roots	1
34. False pareira brava	1
35. Butter-fly pea roots	1
36. Roots of indigo plant	1
37. Nut meg	1
38. Oak galls	1
39. Rhinoceros horn shavings	1
40. Ginger juicie (some quantity)	

Preparation .

Powder the drugs separately Grind 1, 2, 4, 5, 7, 8 and 10 with ginger juice into a semisolid mass. Then add one by one the other drugs and grind with the addition of ginger juice. When suitable consistency is reached make 50 mg. pills.

Action and uses :

Stimulant, hypotensive, anti toxaemic and expectorant. Used in toxaemic states and in allied states of pneumonia, coughs, bronchitis and whooping. Given with the juice of betle leaves or Dasamoolakatuthriyadi decoction.

Dose :

1 to 2 pills twice or thrice daily.

226. HUTASANA RASA (I.M.P.C.P.)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified aconite	1
4. Powder of costus roots	1
5. Three pungents powder (each)	1
6. Three myrobalans powder (each)	1
7. Eclipta prostrata juice (sufficient quantity)	
8. Ginger juice (sufficient quantity)	

(Some people use No. 7 in place of No. 8 also).

Preparation :

Grind 1 and 2 into a black paste add No. 3 and grind with eclipta juice. Add the powders 4, 5 and 6 and continue grinding with the addition of ginger juice. Make 100 mg. tablets.

Action and uses :

Appetiser, expectorant and digestive. Used in the treatment of dyspepsia, indigestion, fever, coughs, cold and bronchitis, with ginger juice and honey or a paste of lesser galangal, black pepper and cumin seeds.

Dose :

1 to 2 tablets twice or thrice daily.

227. ICHABEDI RASA

(Bhaishajya ratnavali : Udararogadhitara)

Drugs required :

	gms.
1. Purified mercury	10
2. Purified sulfur	20
3. Purified borax	40
4. Powdered chebulic myrobalan	60
5. Powdered dry ginger	50
6. Powdered black pepper	30
7. Purified croton seed	120
8. Lime juice (some quantity)	

Preparation :

Grind 1 and 2 into fine black mass. Add 3, 4, 5 and 6 and grind adding 8 until a fine paste is obtained. Add 7 and grind to pill making consistency. Make 50 mg. pills.

Action and uses :

Purgative. Relieves constipation.

Dose :

One to two pills with co'd water in empty stomach. Only one dose. For children one pill or fractions thereof.

228. JAWARA MURARI
(I.M.P.C.P.)

Drugs required :

	part
1. Three pungents (each)	1
2. Calx of borax	1
3. Chirata	1
4. Picrorhiza	1
5. Cinchona febrifuga	3
6. Cardamoms seeds alone	3
7. Lime juice (sufficient quantity)	

Preparation :

Powder the drugs separately to a very fine powder and grind with fresh juice. Make into 200 milligramme tablets.

Action and uses :

Antiperiodic. Used in ordinary fevers and intermittent fevers like malaria. Useful in dyspepsia with juice of ginger, honey and decoction of black pepper.

Dose :

1 tablet. Given twice or thrice a day.

229. JWARANKUSA RASA
(Basavarajeeya : Jwara Prakarana)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified yellow orpiment	$\frac{1}{2}$
4. Purified acconite	$\frac{1}{2}$
5. Purified borax	$\frac{1}{2}$
6. Dry ginger	$\frac{1}{2}$
7. Eclipta prostrata leaves—sufficient quantity for juice.	

Preparation :

Grind mercury and sulfur to preprae khajjali. When khajjali is well formed, and powders of other drugs and gradually add juice of eclipta prostrata. Continue grinding for three days and make 200 mg. tablets.

Action and uses :

Used in all types of fevers inclusive of the Malarial and intermittant fevers.

Dose :

1 tablet with long pepper powder and honey. Twice or thrice a day. Give half tablet for children.

230. KASTOORIYADI GUTIKA

(Sahasrayoga : Gutika Prakarana)

Drugs required :

	part
1. Calx of lead stone	1
2. Calx of borax	1
3. Purified red orpiment	1
4. Purified cinnabar	1
5. Red ochre	1
6. Galena (Black antimony)	1
7. Two alkalis (each)	1
8. Civet	1
9. Musk	1
10. Camphor	1
11. Nutmeg	1
12. Sandal wood	1
13. Black vetiver	1
14. Three aromatics (each)	1
15. Senna leaves	1
16. Cumin seeds	1
17. Nigella seeds	1
18. Ajowan seeds	1
19. Cubebs	1
20. Sweet flag	1
21. Beetle killer root	1
22. Nut grass tubers	1
23. Lesser galangal	1
24. Pellitory	1
25. Liquorice	1

	part
26. Rue	1
27. Three myrobalans (each)	1
28. Three pungents (each)	1
29. Chirata	1
30. Hirvi	1
31. Mace	1
32. Wild Indian Mace	1
33. Cress seeds	1
34. Fresh juice of eclipta prostrata	1

Preparation :

Grind 1 to 33 except 9 with 34. Add 9 at the end
Make 50 mg. pills.

Action and uses :

Cardiac stimulant, cardiac tonic and expectorant.
Used in the treatment of coughs, bronchitis and other
respiratory diseases where heart functioning is depressed.

Dose :

1 to 2 pills twice or thrice daily.

231. KASTOORI MATRALU
(I.M.P.C.P.)

Drugs required :

	part
1. Musk	1
2. Castoreum	1
3. Camel's gall	1
4. Bezoar	1
5. Calomel purified	1
6. Red sulfide of mercury*	1
7. Purified aconite	1
8. Bile of rohitaka fish	1
9. Sannibatha bhairavam	1
10. Vetarakshasam	1
11. Betle leaves (sufficient quantity)	
12. Holy basil leaves (sufficient quantity)	
13. Lesser galangal (sufficient quantity)	
14. Lead wort root (sufficient quantity)	

Preparation :

Grind 1 to 10 in juices of 11 to 14. Make 25 mg. pills.

Action and uses :

Used in coughs and cold and fevers.

Dose :

1 to 2 pills.

* Some people use the medicine "EKAGUNA SINDOORA"—(186)

232. KANTAVALLABHA RASA

(Basavarajeeya : Vata prakarana)

Drugs required :

	parts
1. Calx of load stone	16
2. Calx of iron	14
3. Calx of dross iron	12
4. Calx of borax	10
5. Purified red orpiment	8
6. Asphalt (Bituminous momia)	6
7. Purified mercury	60
8. Purified sulfur	60
9. Juice of red cotton flowers (sufficient quantity)	
10. Aloes leaf pulp (sufficient quantity)	

Preparation :

Prepare black sulphide by grining 7 & 8, and when it is well formed add the other drugs. Continue grinding with the addition of cotton flower juice and aloes pulp. When the mixture is ground to homogeneity, make small cakes and dry. Place the dry cakes in a glass bottle or in enamelled iron bowls and seal with clay smeared ribbon seven times. Place in sand bath and heat for seven days. Then remove and collect the medicine sublimed at the upper portion as well as the residue left below. Mix them thoroughly and bottle.

Action and uses :

Haematinic, tonic, appetiser. Useful in anaemia, jaundice, oedema, pthisis, coughs, bronchitis and the disorders of the liver and spleen.

Dose :

200 mg. twice or thrice a day.

233. KALAGNI RUDHRA RASA

(Basavarajeeya : Vata Prakarana)

Drugs required :

	part
1. Purified mercury	1
2. Purified aconite	1
3. Purified sulphur	1
4. Ajowan seed powder	1
5. Three myrobalans powder each (with- out seeds)	1
6. Two alkalis (each)	1
7. Lead wort root powder	1
8. Rock salt powder	1
9. Common salt	1
10. Cumin seeds powder	1
11. Embelia fruit powder	1
12. Purified borax	1
13. Three pungents powder (each)	1
14. Nux vomica seeds powder (purified)	18
15. Lime juice (sufficient quantity)	

Preparation :

Grind all the drugs in lime juice to consistency and make 100 mg. pills.

Action and uses :

Digestive, carminative, astringent, stimulant and nervine tonic. Used in paralysis, paraplegia and nervous diseases ; useful in fevers, dysentery, intestinal disorders etc. It is usually given with a decoction of cumin seeds and black pepper or lesser galangal.

Dose :

1 to 2 pills twice or thrice daily, with some ghee and black pepper powder.

234. KALA KOOTA RASA

(Basavarajeeya : Sannipatha Prakarana)

Drugs required :

	parts
1. Purified aconite	11
2. Purified mercury	3
3. Purified sulfur	5
4. Purified red orpiment	6
5. Calx of copper	4
6. Calx of borax	7
7. Purified yellow orpiment	9
8. Lead wort root	9
9. Three myrobalans (each)	10
10. Three pungents powder (each)	12
11. Asafoetida	1
12. Sweet flag powder	1
13. Ginger juice (some quantity)	
14. Lead wort juice (some quantity)	
15. Lime juice (some quantity)	
16. Garlic juice (some quantity)	
17. Wild liquorice juice (some quantity)	
18. Drum stick tree bark juice (some quantity)	
19. Calotropis juice (some quantity)	
20. Glory lily rhizome juice (some quantity)	
21. Coldenia procumbens juice (some quantity)	
(juice of maiden hair fern cou'd be used)	
22. Negundo leaf juice (some quantity)	
23. Betle leaves juice (some quantity)	
24. Sage leaved alangium root juice (some quantity)	
25. Wild drum stick juice (some quantity)	
26. Decoction of five spices (some quantity)	
27. Decoction of five roots-greater (some quantity)	

Preparation :

Grind into a black mass 2 and 3. Add 1 and 4 to 12 one by one and grind with 13 to 27 separately and make 100 mg. pills. (Grind atleast for a day with each liquid).

Action and uses :

Used in enteric and malarial fevers with Amritharishta and Dasamoolarishta or Kiratharishta.

Dose :

1 tablet twice or thrice daily, with juice or decoction of ginger.

235. KARPOORADI RASA

(Bhaishajyaratnavali : Ateesaradhikara)

Drugs required :

	part
1. Purified cinnabar	1
2. Nutgrass tubers	1
3. Tellicherry seeds	1
4. Nutmeg	1
5. Camphor pure	1
6. Calx of borax	1
7. Ajamodarka or water	

Preparation :

Grind all the drugs with water or Ajamodarka and prepare 100 mg. pills. (for ajomodarka please see medicine No. 1 of this book).

Action and uses :

Astringent, digestive and carminative. Used in diarrhoea, dysentery and cholera with a paste of cinnamon bark, tellicherry seeds and cumin seeds.

Dose :

1 to 2 pills twice or thrice daily.

236. KRAVYADI RASA

(Basavarajeeya : Ajeerana Prakarana)

Drugs required :

	parts
1. Purified sulphur	2
2. Purified mercury	1
3. Calx of copper	1
4. Calx of iron	1
5. Lime juice (some quantity)	
6. Decoction of five spices (some quantity)	
7. Decoction of malabar tamarind (some quantity)	
8. Calx of borax	5
9. Bida lavana (vit salt)	2½
10. Black pepper	12½
11. Bengal gram (some quantity)	

Preparation :

Melt sulphur in an iron container and add mercury, calx of copper and calx of iron. Mix well and pour on a castor leaf. When it has solidified grind it and place in an iron vessel. Cover it with a lid. Heat on fire for about three hours then open the cover and pour fresh lime juice and stir with an iron spoon. Completely evaporate the water. Cool the mixture and grind with decoction of five spices and decoction of malabar tamarind pulp, alternatively for 50 times. After the completion of the process add calx of borax and bidalavana. Grind, and when completely mixed add powdered black pepper. Grind again with water obtained by soaking bengal

gram until the medium has become sour. Grinding with this sour liquid has to be continued for 7 days. Make 100 mg. pills.

Action and uses :

Appetiser, carminative and digestive. Used in dyspepsia, indigestion, haemorrhoids, enteropathy and the enlargement of the liver and the spleen.

Dose :

200 to 500 mg. twice or thrice a day.

237. KRAMA VRIDDHI LAKSHMIVILASA RASA
(I.M.P.C.P.)

Drugs required :

	parts
1. Calx of gold	1
2. Calx of silver	2
3. Calx of copper	3
4. Calx of load stone	4
5. Calx of iron	5
6. Calx of dross iron	6
7. Calx of mica	7
8. Calx of tin	8
9. Calx of lead	9
10. Calx of pearl	10
11. Calx of corals	11
12. 'Eka guna sindoora' (a prepared medicine)	66
13. Mace (some quantity)	
14. Cinnamon leaves (some quantity)	
15. Three pungent's (some quantity)	
16. Three myrobalans (some quantity)	
17. Four aromatics (some quantity)	
18. Saffron	2
19. Musk	1

Preparation :

Mix 1 to 12 and grind in the decoctions of the other seven drugs for 1 day each. Make 100 mg. tablets.

Action and uses :

Promotes vitality. Aphrodisiac, cardiac tonic and nervine tonic. Useful in phthisis, wasting diseases, anaemia, diabetis, neuritis, and neurasthenia. It improves memory and is a general tonic. It is useful in respiratory disorders, coughs, colds, and bronchitis.

Dose :

100 to 200 mg. twice daily with sugar, ghee and honey.

238. KRIMIMUDGARA RASA

(Vaidya Chintamani : Krimi Prakarana)

Drugs required :

	parts
1. Purified mercury	1
2. Purified sulphur	2
3. Ajowan seed powder	3
4. Embelia fruit powder	4
5. Nux vomica seed powder	5
6. Bengal kino seeds (Butea seeds)	6

Preparation :

Grind mercury and sulphur, add the rest of the drugs and powder. (Some people make a decoction of some quantity of drugs 5 & 6 and use it in grinding).

Action and uses :

Anthelmintic. Used in the infection of the intestines by round worms and thread worms.

Dose :

200 to 300 mg. with embelia decoction or honey.

239. LAKSHMINARAYANA RASA

(Bhaishajyaratnavali : Soothikaroga Chikitsa)

Drugs required :

	part
1. Purified sulphur	1
2. Purified borax	1
3. Purified aconite	1
4. Purified cinnabar	1
5. Calx of mica	1
6. Rock salt	1
7. Picrorhiza powder	1
8. Alis root powder	1
9. Long pepper powder	1
10. Tellicherry seeds	1
11. Croton roots (some quantity)	
12. Three myrobalans (some quantity)	

Preparation :

Grind mercury and sulphur. Then add calx of mica and then the rest of the drugs upto 10. Grind well and continue grinding with addition of croton root decoction for 3 days and with 3 myrobalan decoction for 3 days. Make 100 mg. pills.

Action and uses :

Anti periodic, anti toxaemic, anti infective and expectorant. Used in purpereum with cumin seed and black pepper decoction. Respiratory disorders and coughs are treated with black pepper and lesser galangal juice given with this medicine.

Dose :

2 tablets twice or thrice a day with honey or ginger juice.

249. LAKSHMIVILASA RASA

(Basayoga Ratnagara)

Drugs required :

	part
1. Calx of iron	1
2. Calx of copper	1
3. Calx of lead stone	1
4. Calx of copper pyrites	1
5. Calx of silver	1
6. Purified cinnabar	1
7. Purified mercury	6
8. Purified sulfur	6
9. Tinospora juice (some quantity)	
10. Ginger juice (some quantity)	

Preparation :

Grind 7 and 8, add 6 and then the other drugs and continue grinding with the addition of tinospora juice for 7 days. Subject the mass to sublimation by the sand-bath process for 24 hours. Cool and grind with ginger juice to make 100 mg pills.

Action and uses :

Expectorant and haematinic. Used in coughs, bronchitis, phthisis, anaemia, jaundice and oedema. Useful also in the treatment of chronic fevers.

Dose :

200 mg. twice or thrice daily with honey or ginger juice.

241. LASUNADIVATI
(Lolambarajeeya : Vishuchika Chikitsa)

Drugs required :

	part
1. Garlic	1
2. Cumin seeds	1
3. Rock salt	1
4. Purified sulfur	1
5. Three pungents each	1
6. Asafoetida	1
7. Margosa bark (some quantity)	

Preparation :

Grind sulfur, rock salt and garlic in the juice of margosa bark until a uniform fine paste is obtained. Then add the powder of the other drugs one after another and continue grinding with the addition of margosa bark juice for 7 days. Make 200 mg. tablets.

Action and uses :

Astringent, digestive and carminative. Useful in diarrhoea, gastro enteritis, cholera and dyspepsia, flatulance and related digestive disorders. Ajāmodarka or Karpooradiyarka are given in combination with this medicine.

Dose :

1 tablet twice or thrice a day.

242. LOHA RASAYANA

(Lolambarajeeya : Chapter IV)

Drugs required :

	part
1. Purified mercury ..	1
2. Purified sulfur ..	1
3. Calx of iron ..	3
4. Juice of holy basil (some quantity)	
5. Three pungents (some quantity)	
6. Lesser galangal (some quantity)	
7. Tinospora (some quantity)	
8. Lead wort root (some quantity)	
9. Three myrobalans—juice or decoction (some quantity)	
10. Negundo leaves—juice or decoction (some quantity)	
11. Pomogranate—juice or decoction (some quantity)	
12. Lotus rhizome—juice or decoction (some quantity)	
13. Eclipta prostrata—juice or decoction (some quantity)	
14. Yellow nail dye plant*—juice or decoction (some quantity)	
15. Bengal kino bark—juice or decoction (some quantity)	
16. Banana rhizome—juice or decoction (some quantity)	
17. Gum arabic bark—juice or decoction (some quantity)	
18. Evolvulus alsinoides—juice or decoction (some quantity)	

* Or field bind weed.

Preparation :

Grind 1 and 2 then add 3 after 3 days of grinding with the addition of water, make small balls and dry, keep them in a copper container with a copper lid. Keep this capsule for 3 days in a paddy heap. On the 4th day take the balls and grind with 4 to 8 individually for 3 days with each. Then place the medicine in an iron mortar and grind with 9 to 13 for 3 days with each. Dry the mass and powder.

Action and uses :

Appetiser, haematinic. Useful in the treatment of anaemia jaundice and oedema. It is given as a tonic with other medicines also.

Dose :

100 to 200 mg. twice or thrice daily with honey.

243. LOGHA NATHA RASA

(Basavarajeeva : Kashaya Prakarana)

Drugs required :

	part	gms.
1. Calx of cowries	1 ..	80
2. Calx of dross iron	1 ..	80
3. Calx of iron	$\frac{1}{2}$..	40
4. Purified mercury	$\frac{1}{8}$..	10
5. Purified sulfur	$\frac{1}{4}$..	20
6. Spreading hogweed juice (some quantity)		
7. Juice of square stalked vine (some quantity)		
8. Juice of a'chatoda leaves (some quantity)		
9. Juice of thyme leaved gra'iola (some quantity)		

10. Juice of lead wort root (some quantity)
11. Black pepper (some quantity)
12. Ginger juice (some quantity)
13. Betle leaf juice (some quantity)
14. Eclipta prostrata (some quantity)
15. Indian globe flower juice (some quantity)
16. Negundo leaf juice (some quantity)
17. Drum stick bark juice (some quantity)
18. Three myrobalans decoction (some quantity)

Preparation :

Make khajjali of mercury and sulfur, add the rest and grind with the juices 6 to 10 for 3 days with each. Make the paste into small pills and dry. Subject it to calcination in a capsule of two earthen discs. After 3 hours of heating cool the capsule recover the powder and add it with an equal amount of black pepper powder (11). Grind this mixture for a day with each of the rest of the juices and prepare 100 mg. pills.

(Usually 9 is omitted).

Action and uses :

Haematinic, restorative and expectorant. Used in the treatment of anaemia, jaundice, oedema, pthisis, coughs, and bronchitis. In anaemia, jaundice and oedema it is given with a decoction of spreading hogweed or preferably Punarnavasava. In pthisis it is given with Taleesadi churna or Sitopha'adi choorna. In coughs and bronchitis it is given with Vasarishta and/or Kar-pooradi choorna. In chronic fevers it is given with Amritharishta.

Dose :

1 to 2 tablets twice or thrice daily, with honey.

244 MAHALAKSHMI VILASA RASA
(Ayurveda Oushadha Ratnakara)

Drugs required :

	parts
1. Purified mercury	6
2. Purified sulfur	6
3. Purified cinnabar	1
4. Calx of gold	1
5. Calx of silver	1
6. Calx of load stone	1
7. Calx of iron	1
8. Calx of copper pyrites	1
9. Juice of tinospora (some quantity)	

Preparation :

Grind 1 and 2 to prepare the black mass. Then add the other drugs. Grind for 7 days with the addition of tinospora juice. Then transfer to a glass bottle or flask and put in sand bath and heat for 24 hours. Collect the contents of the flask. Powder and store.

Action and uses :

Haematinic, tonic. Used in the treatment of tuberculosis, anaemia, wasting diseases, emaciation, respiratory disorders and chronic fevers.

Dose :

100 to 200 mg. twice or thrice daily with honey or ginger juice.

245. MAHA JWARANKUSA RASA

(Basavarajeeya : Jwara Prakarana)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified aconite	1
4. Purified dhatura seeds	3
5. Three pungents (total)	12
6. Lime fruits (some quantity)	
7. Ginger (some quantity)	

Preparation :

Make khajjali with mercury and sulfur. Add the other drugs and grind with the addition of lime juice. After three days of grinding continue grinding with the addition of ginger juice for three days. Make 50 mg. tablets.

Action and uses :

Antiperiodic. Useful in intermittant fevers and chronic fevers. Antitoxaemic. Useful also in typhoid. Usually given with Dasamoolarishta and musk.

Dose :

1 to 2 tablets twice or thrice a day with fresh ginger juice and honey.

246. MAHAYOGARAJA GUGGULU
(Bhaishajyaratnavali : Amavatathikara)

Drugs required :		part
1.	Calx of mica	1
2.	Calx of tin	1
3.	Calx of iron	1
4.	Three pungents (each)	1
5.	Three myrcbalans (each)	1
6.	False pereira brava	1
7.	Rue	1
8.	Turmeric	1
9.	False calumba stem (ceylon calumba)	1
10.	Ajowan seeds	1
11.	Sweet flag	1
12.	Asafoetida	1
13.	Indian globe flower	1
14.	Large long pepper	1
15.	Nigella seeds	1
16.	Round zedoary	1
17.	Coriander seeds	1
18.	Three salts (each)	1
19.	Long pepper roots	1
20.	Four aromatics (each)	1
21.	Cuttle fish bone	1
22.	Sal tree resin	1
23.	Small caltrops	1
24.	Lesser galangal	1
25.	Atis roots	1
26.	Dry ginger	1
27.	Carbonate of potash	1
28.	Malabar tamarind	1
29.	Lead wort root	1
30.	Costus root	1
31.	Cubebs	1
32.	Tamarind	1

	part
33. Pomegranate rind	1
34. Castor roots	1
35. Withania roots	1
36. Turpith roots	1
37. Croton roots	1
38. Jujube fruits	1
39. Himalayan cedar wood	1
40. Picrorhiza	1
41. Bowstring hemp—rhizome	1
42. Indian beach tree bark	1
43. Climbing nettle roots	1
44. Embelia fruits	1
45. Henbane niger	1
46. Root of adhatoda plant	1
47. Purified Indian bdellium	56
48. Honey (some quantity)	
49. Ghee (some quantity)	

Preparation :

Prepare a fine powder of 1 to 46 mix with Indian bdellium. Grind the mixture with some honey. When the consistency is reached prepare 500 mg. pills.

Action and uses :

Blood purifier, antiinflammatory. Used in arthritis, rheumatism and allied condition on of the body with the decoction of lesser galangal. In skin diseases it is given with a decoction of margosa bark, indian beach tree bark, embelia fruits, and Indian globe flower. In emaciation and body weakness it is given with Aswagandhi lehya. In mercurialism it is given with a decoction of madder, gum acacia bark and false pareira brava roots.

Dose :

1 to 2 pills twice or thrice daily ; with hot water.

Purification of Indian bdellium :

It is purified by steaming it with a decoction of three myrobalans, till all the decoction is evaporated. Some people use a decoction of aconite, madder, aghatoda leaves and ajowan seeds. One pound of each of these drugs boiled with 16 pounds of water and the decoction reduced to $\frac{1}{4}$ is used for the purification of 1 pound of bdellium.

Raw bdellium is bluish green and hard. When it is purified it becomes brownish and plastic.

247. MAHAVANGESWARA RASA

(Yogaratanakara : Pramehadhikara)

Drugs required :

	part
1. Calx of tin	1
2. Calx of load stone	1
3. Calx of mica	1
4. Flowers of tanner's cassia	1
5. Indian aloe juice (sufficient quantity)	

Preparation :

Grind 1 to 4 in five for seven days. Make 100 mg pills.

Action and uses :

Diuretic Useful in the treatment of urinogenital disorders. It is given with a decoction of common fig bark in diabetes. In urinary calculi, dysurea, and other obstructions it is given with Gokshuradi choorna or decoction. In leucorrhoea it is given with Pushyanuka choorna.

Dose :

1 to 2 pills twice or thrice daily, with honey.

248. MAHAGANDHAKARASAPARPATI OR MAHA GANDHAKAM

(Bhaishajyaratnavali : Grahaniyadhikara)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Nut meg	1
4. Mace	1
5. Cloves	1
6. Margosa leaves	1

Preparation :

Grind 1 and 2 and melt it in an iron spoon on a fire of jubub tree wood. Pour the molten mixture on a castor leaf, placed on cowdung. When it is cooled grind it (the solidified mass of mercury and sulfur) with 3 to 6 and make a semi solid mass. Place this in a pearl oyster shell and cover it with its counterpart. Wrap it in a plantain leaf and seal with a clay smeared ribbon. When the capsule is dried place it in intense coal fire until it is heated red hot. Take it out, cool it and recover the contents. Powder and store.

Action and uses :

Astringent, digestive, expectorant and sedative. Used in dysentery and coughs and bronchitis. In dysentery it is given with tellicherry seeds and cumin seeds decoction. In coughs it is given with Taleesadi choorna.

Dose :

200 to 400 mg. twice or thrice with honey.

249. MAHASEETAMSU RASA
(I.M.P.C.P.)

Drugs required :

	part
1. Seetamsu rasa (prepared medicine) ..	2
2. Quinine sulfate ..	1
3. Margosa bark (some quantity)	

Preparation :

Grind 1 and 2 adding margosa bark juice. Make 100 milligram tablets.

Action and uses :

Antiperiodic and antimalarial. Useful in other types of fevers also. Given in liver and spleen disorders resulting from malarial fevers. It is used along with Panchathiktharishta.

Dose :

1 to 2 tablets twice or thrice a day ; with black pepper decoction or honey or water.

250. MAHA SOORYAVARTI RASA
(Rasayoga Ratnakara Ch. IV)

Drugs required :

	parts
1. Purified cinnabar ..	7
2. Calx of gold ..	1
3. Red cotton seed kernels ..	5
4. Calx of borax ..	3
5. Nagakeshar stamens ..	3

	parts
6. Cloves ..	4
7. Dry ginger ..	5
8. Cardamoms ..	6
9. Tinospora starch ..	7
10. Musk ..	$\frac{1}{2}$
11. Decoction of cloves (some quantity)	
12. Ginger juice (some quantity)	
13. Decoction of raisins (some quantity)	

Preparation :

Grind No. 1 with decoction of cloves. Add No. 2, grind and add the other drugs one after another, upto 9. Grind for 7 days in each, with clove decoction, ginger juice and raisin decoction until consistency is reached. Add No. 10 at the end and make 100 mg. tablets or pills.

Action and uses :

Digestive, appetiser and carminative. Used in dyspepsia, indigestion, vomiting and morning sickness, with decoction/juices of raisins, coriander, cumin seeds and ginger.

Dose :

1 pill twice or thrice daily

251. MAKARADHWAJA PILLS

(Bhaishajyaratnavali : Vajeekarnadhikara)

Drugs required :

	part
1. Makaradhwaja sindoor with gold ..	1
2. Camphor pure ..	4
3. Powder of cloves ..	4

	part
4. Cubebs powder	4
5. Nut meg powder	4
6. Musk	$\frac{1}{2}$

Preparation :

Grind 1 and 6 with some water. Then add the other powders one by one and continue grinding with addition of more water until the consistency is attained. Make 100 mg. pills.

Action and uses :

Vitaliser and aphrodisiac. Given in consumptive cases. Continuous use promotes and increases manliness.

Dose :

1 to 2 tablets per day with hot milk.

252. MALINEEVASANTA RASA

(Bhasavarajeeya : Jeerna Jwara Prakarana)

Drugs required :

	part.
1. Purified carbonate of zinc (calamine) ..	2
2. Powder of black pepper ..	1
3. Margosa bark decoction (some quantity)	

Preparation :

Grind 1 and 2 with 3 and make 100 mg. tablets.

Action and uses :

Astringent, antiperiodic. Used in the treatment of Chronic and intermittant fevers. Used in enteropathies. It is given with Kutajarishta, Dasamoolarishta or Amritharishta.

Dose :

1 pill twice or thrice daily.

253. MARMA GUTIKA

(Sahasra Yoga : Gutika Prakarana)

Drugs required :

	parts
1. Bamboo manna	3
2. Indian olibanum resin	8
3. Aloes	6
4. "Kantivenna"	1
5. Gypsum	1
6. Opium	1
7. Red ochre	1
8. Bdellium	1
9. Juice of aloes (sufficient quantity)	

Preparation :

Grind 1 to 8 with 9 and roll into 1 gm. pills or balls. (For drugs 2 and 4, mastiche is substituted).

Action and uses :

Antimicrobial and healing. Used for topical application in chronic ulcers, wounds and inflammatory swellings. For external use only.

254. MANASAMITHRAM

(Sahasrayoga : Gutika Prakarana)

Drugs required :

	part
1. Calx of gold	1
2. Calx of silver	1
3. Calx of pearls	1
4. Calx of corals	1
5. Calx of antlers of deer	1
6. Calx of copper pyrites	1
7. Calx of iron	1
8. Rock lichenes	1
9. Country mallow roots	1
10. Sida roots	1
11. Bael tree roots	1
12. Roots of sweet smelling hare foot	1
13. Butterfly pea roots	1
14. China root	1
15. Costus root	1
16. Sweet flag	1
17. Two sandal woods each	1
18. Mahua tree root	1
19. Cinnamon bark	1
20. Long pepper	1
21. Elavaalukam (a malabar drug)	1
22. Colocynth	1
23. Sea coconut kernel	1
24. Negundo roots	1
25. Nut grass tubers	1
26. Lesser galangal	1
27. Elephantopus scaber	1
28. Lotus stamen	1
29. Two night shades (each)	1
30. Indian globe flower	1

	part
31. Indian penny wort ..	1
32. Chirata ..	1
33. Bark of casia pod tree ..	1
34. Wild date fruits ..	1
35. Three myrobalans (each) ..	1
36. Tinospora ..	1
37. Two sarsaparillas (each) ..	1
38. Lep'adenia reticulata stem ..	1
39. Sarcostema stem (moon plant) ..	1
40. Withania roots ..	1
41. Turmeric ..	1
42. Vetiver roots ..	1
43. Raisins ..	1
44. Licuorice roots ..	1
45. Bermuda grass ..	1
46. Maiden hair fern (or coldenia herb) ..	1
47. White cutch (or Gambier) ..	1
48. Cloves ..	1
49. Holy basial leaves ..	1
50. Eight drug group (each) ..	1
51. Camphor pure ..	1
52. Musk ..	1
53. Saffron ..	1
54. Decoction of Indian beech bark (some quantity)	
55. Decoction of butterfly pea roots (some quantity)	
56. Decoction of sweet flag (some quantity)	
57. Decoction of cowhage roots (some quantity)	
58. Decoction of Ipomoea sepiaria (some quantity)	
59. Decoction of bael roots (some quantity)	
60. Decoction of Sida roots (some quantity)	

61. Decoction of cumin seeds (some quantity)
62. Cow's milk (some quantity)
63. Decoction of moon plant (*Sarcostemma*)
(some quantity)
64. Human breast milk (some quantity)

Preparation :

Powder the drugs 1 to 50 individually. Grind this mixture with the decoctions 54 to 64 for three days in each. Then add 51, 52 and 53 and bring to consistency. Prepare 500 mg. pills and dry in shade.

Action and uses :

Brain tonic, tranquiliser and nervine tonic. Used in insanity, schizophrenia and loss of memory. Given to calm down states of anxiety.

Dose :

1 to 2 pills twice or thrice daily preferably with breast milk.

255. MRITYUNJAYA RASA

(Basavarajeeya : Jwaraprakarana)

Drugs required :

	part
1. Purified aconite	1
2. Purified borax	1
3. Purified cinnabar	2
4. Purified sulfur	1
5. Three pungents powder (each)	1
6. Lime juice (some quantity)	

Preparation :

Grind cinnabar in lime juice for a day and dry. Then grind with water adding sulfur then add the rest of the drugs and grind to consistency adding some water. Make 100 mg. pills.

Action and uses :

Antiperiodic, used in the treatment of all types of fevers, pneumonia, enteric fevers, common cold and rheumatism.

Dose :

1 to 2 pills twice or thrice daily with some honey or sugar.

256. NARAYANA JWARANKUSA RASA

(Yoga Ratnakara : Jwara Chikitsa)

Drugs required :

	part
1. Purified arsenic oxide white	1
2. Purified aconite	1
3. Purified mercury	1
4. Purified sulfur	1
5. Purified yellow orpiment	1
6. Indian hemp seeds*	1
7. Purified dathura seeds	1
8. Calx of borax	1
9. Calx of cowries	1
10. Dry ginger powder	1
11. Long pepper powder	1
12. Black pepper powder	1
13. Ginger juice (some quantity)	

Preparation :

Grind mercury and sulfur into a black mass. Add the other drugs and grind to consistency with ginger juice for three days. Make 50 mg. pills.

* Due to prohibition of narcotics, 6 is not usually used.

Action and uses :

Anti toxæmic and anti periodic. Expectorant. Used in all respiratory disorders, malarial and other fevers with fresh ginger juice or Panchathiktha decoction or powder of three pungents.

Dose :

1 to 2 pills, with honey and ginger juice twice a day.

257. NIROORYADI GUTIKA
(Sahasrayoga Gutika Prakarana)

Drugs required :

	part
1. Phyllanthus reticulatus twigs or roots ..	1
2. Tamarind testa (seed coat) ..	1
3. Three myrobalans (each) ..	1
4. Red ochre ..	1
5. Calx of load stone ..	1
6. Turmeric ..	1
7. False calumba stem (ceylon calumba) ..	1
8. Wood apple gum ..	1
9. Water lily seeds ..	1
10. Sandal wood ..	1
11. Clearing nut (nux potatorum) ..	1
12. Sugar ..	1
13. Cuttle fish bone (os sepiae) ..	1
14. Ekanayakam ..	1
15. Bark of common fig (some quantity)	

Preparation :

Powder the drugs 1 to 14 and grind to consistency with the decoction of 15. Make 500 mg. pills.

Action and uses :

Tonic, used in diabetes and diabetic carbuncles with decoction of turmeric or three myrobalans or with Tharakeswara rasa.

Dose :

1 to 2 tablets twice or thrice daily.

258. PANCHABANA RASA

(Yoga Ratnakara : Vaajeeekarana Adhikara)

Drugs required :

	part
1. Ekaguna sindoora ..	1
2. Calx of gold ..	$\frac{1}{2}$
3. Calx of mica ..	1
4. Calx of iron ..	1
5. Calx of lead ..	1
6. Calx of sacred conch ..	1
7. Calx of tin ..	1
8. Calx of cowrie shells ..	1
9. Cow's milk (some quantity) (for 3 days)	
10. Decoction of poppy fruit rind (some quantity) (for 21 days)	
11. Decoction of liquorice (some quantity) (for 7 days)	
12. Decoction of dhatura root (some quantity for 7 days)	

13. Decoction of cloves (some quantity
(for 7 days)
14. Decoction of pellitory or Indian atees
(some quantity) (for 7 days)
15. Decoction of dry ginger (some quantity)
(for 7 days)
16. Decoction of nut meg (some quantity)
(for 7 days)
17. Decoction of three myrobalan (some
quantity (for 7 days)
18. Decoction of Alangium roots (some
quantity (for 7 days)
19. Decoction of sandal wood (some quantity)
(for 7 days)

20. Musk

part
 $\frac{1}{4}$

Preparation :

Grind 1 to 8 in 9 to 19 for the time indicated against them to consistency and add 20. Make 100 mg. pills.

Action and uses :

Tonic and aphrodisiac. Used in cases of neurasthenia and sexual impotency.

Dose :

200 to 400 mg. twice or thrice daily with honey.

259. PANCHAMRITHA PARPATI
(Bhaishajyaratnavali : Grahanyadikara)

Drugs required :

	parts
1. Purified mercury	4
2. Purified sulfur	8
3. Calx of iron	2
4. Calx of mica	1
5. Calx of copper	1

Preparation :

Grind mercury and sulphur into a black mass. Add the rest of the drug and grind. Place the product in a sufficiently large spoon on fire until it is molten. When completely molten pour it on a plantain leaf placed on cowdung to form a thin sheet. Take the solidified sheet when cooled, break and grind into a fine powder.

Action and uses :

Astringent, digestive, tonic, restorative, expectorant and sedative. Used in diarrhoea and dysentery with Dhadimashtaka churnam. Used in coughs, bronchitis, pthisis and other respiratory disorders with bamboo manna, finospora starch, cloves and liquorice in powdered form.

Dose :

200 to 400 mg. with ghee or honey twice daily.



260. PRADARANTAKA RASA
(Bhaishajyaratnavali : Streerogadhikara)

Drugs required :

	part
1. Purified mercury ..	1
2. Purified sulfur ..	1
3. Carbonate of zinc (native calamine) ..	1
4. Calx of tin ..	1
5. Calx of silver ..	1
6. Calx of iron ..	12
7. Calx of cowrie shells ..	1
8. Indian aloe juice (sufficient quantity)	

Preparation :

Grind mercury and sulfur and add the rest of the drugs and grind for 3 days with the addition of aloe juice. Make a fine powder of the resultant mass.

Action and uses :

Haematinic and uterine tonic. Used in metrorrhagia and menorrhagia with cumin seeds, and sugar candy. Used in sexual debility and in leucorrhoea with powder of black pepper, Asparagus roots etc. Used in anaemia with honey as vehicle.

Dose :

200 to 400 mg. twice or thrice daily.

261. PRATHAPA LANKESHWARA
(Bhaishajya ratnavali : Jwara Adhikara)

Drugs required :

	gms.
1. Purified mercury ..	10
2. Purified sulfur ..	10
3. Calx of mica ..	10
4. Purified aconite ..	10
5. Purified borax ..	10
6. Purified yellow orpiment ..	10
7. Calx of iron ..	10
8. Calx of lead ..	10
9. Calx of tin ..	10
10. Powder of Mahua flowers (some use wood) ..	10
11. Powder of nut grass tubers ..	10
12. Powder of Piper arauntiacus fruits ..	10
13. Purified red orpiment ..	10
14. Powder of Nagakeshar ..	10
15. Purified Indian bdellium ..	10
16. Purified aconite ..	5
17. Powder of prickly chaff flower root (some quantity)	
18. Powder of lead wort root (some quantity)	
19. Decoction of prickly chaff flower roots	
20. Decoction of leadwort root (some quantity)	
21. Decoction of black musale root (some quantity)	
22. Decoction of three pungents (some quantity)	
23. Juice of datura leaves (some quantity)	
24. Decoction of three myrobalans (some quantity)	

25. Juice of Agati flowers (some quantity)
26. Decoction of cuttle fish bone (some quantity)
27. Decoction of Indian hemp (some quantity)
28. Gall bladder of goat (some quantity)
29. Gall bladder of fish (some quantity)
30. Gall bladder of crocodile (some quantity)
31. Gall bladder of ox (some quantity)
32. Gall bladder of tiger (some quantity)
33. Powder of purified aconite (about 165 grams)

Preparation :

Grind mercury with the powders of prickly chaff flower and leadwort roots. Strain the mercury and grind it with sulfur into the conventional black mass. Add to this, calx of mica, purified aconite, purified yellow orpiment and purified borax and grind, with decoction of prickly chaff flower root for 7 days, with the decoction of lead wort root for 7 days and with the decoction of black musale root for 7 days. Dry the resultant mass and calcine in an earthen crucible. Collect the calcined contents, add the powders of Mahua flowers, nut grass tubers, piper fruit, purified red orpiment, nagakeshar, purified aconite and the calxes of iron, tin, and lead and Indian bdellium. Grind this mixture with the decoction of atees for an hour and then keep in sun for an hour. Repeat this seven times. Then soak the material over night and grind for a day in each of the following : Decoction of three pungents, juice of datura leaves, decoction of three myrobalans, juice of agati flowers, a paste of cuttle fish bone, decoction of Indian hemp leaves and decoction of lead wort root.

Finally grind with the gall bladders (with bile) of goat, fish, crocodile, ox and tiger.

Add to the resultant, an equal weight of purified aconite powder. Make pills of 100 mg. weight, after grinding to consistency.

Action and uses :

Antitoxic, antitoxaemic and antibacterial. Useful in serious cases of typhoid and pneumonia, accompanied with delirium and coma.

Dose :

1 to 2 pills. Twice or thrice daily with honey.

262. PRANADA GUTIKA

(Mandoora Vataka)

(Ashtangahridayam : Pandu Chikitsa)

Drugs required :

	part
1. Calx of copper pyrites ..	1
2. False calumba stem (ceylon calumba) ..	1
3. Long pepper root ..	1
4. Himalayan cedar wood ..	1
5. Cubebs ..	1
6. Three pungents (each) ..	1
7. Three myrobalans (each) ..	1
8. Lead wort root ..	1
9. Nut grass tubers ..	1
10. Calx of dross iron ..	28
11. Embelia fruit ..	1
12. Cow's urine sufficient quantity about (3 litres)	

Preparation :

Powder the plant drugs. Filter cow's urine. Add the powders of plant drug to cow's urine and boil until it reaches a semisolid consistency. Remove it from the fire and add 1 and 10. Mix well and make 500 mg. pills. (Some people boil calx of dross iron in cow's urine add other drugs and make pills.)

Action and uses :

Digestive, haematonic and tonic. Useful in anaemia, jaundice, oedema, diabetes and the enlargement of the liver and the spleen.

Dose :

1 to 2 tablets ; twice or thrice daily with butter milk

263. PUNAENAVADI MANDOCRA
(Bhaishajyaratnavali : Pandukamaladhikara)

Drugs required :

	part
1. Spreading hog weed roots	1
2. Turpith roots	1
3. Six spices	1
4. Embelia fruits	1
5. Cedar wood	1
6. Costus root	1
7. Three myrobalans (each)	1
8. Turmeric	1
9. False calumba stem (ceylon calumba)	1
10. Croton roots	1
11. Telicherry seeds	1
12. Nutgrass tubers	1

	part
13. Picrorhiza	1
14. Calx of dross iron	1
15. Cow's urine sufficient quantity (5 litres)	

Preparation .

Powder 1 to 13, mix with 14 and grind with 15. When completely mixed, keep on an oven and heat until the mass is dehydrated. Powder the material and preserve.

Action and uses :

Haematinic, diuretic and digestive. Used in anaemias, oedema, jaundice and the disorders relating to the liver and spleen, with a decoction of spreading hog weed and Gokshuradi churna. Given in the treatment of ascitis.

Dose :

1 to 1.5 gm. twice or thrice daily with hot water or butter milk or as directed.

264. PYTYANTHAKA RASA (I.M.P.C.P.)

Drugs required :

	parts
1. Purified cinnabar	2
2. Sugar	10
3. Citric acid	3
4. Rock salt	2
5. Dry ginger powder	3
6. Cumin seeds powder	3
7. Lime juice (some quantity)	

Preparation :

Grind cinnabar in some lime juice, add 2, 3 and 4 one by one, mix and grind. Then add the other drugs and grind adding lime juice for 7 days continuously. When semisolid, store.

Action and uses :

Appetiser, and digestive. Used in dyspepsia, loss of appetite, loss of taste ; vomiting and giddiness.

Dose :

200 to 500 mg. twice or more if necessary. To be licked little by little.

265. RAJATHA LOHA RASAYANA

(Rasayogaratnakara)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	2
3. Purified silver filings or leaves	1
4. Calx of iron ;	3
5. Juice of aloes (some quantity)	
6. Juice of adamant creeper (some quantity)	
7. Juice of spreading hog weed (some quantity)	
8. Juice of leadwort root	
9. Juice of ginger (some quantity)	
10. Juice of thyme leaved gratiola (some quantity)	
11. Juice of Eclipta prostrata (some quantity)	
12. Decoction of three myrobalans (some quantity)	

Preparation :

Make an amalagam of mercury and silver, add sulfur and grind. Then add the calx of iron and grind for three days with each of the liquids. Dry the resultant mass and subject it to the sand bath process of preparing the sublimate. Collect the sub'imate and grind with some amount of the same juices mentioned above for 3 days with each. Prepare 100 mg. pills. Preferably stored as powder.

Action and uses :

Diuretic, haematinic and tonic. Useful in the treatment of anaemia, jaundice and oedema. It is given with Thalisdhi or Gokshuradi choorna.

Dose :

200 to 400 mg. twice or thrice daily with honey.

266. RAJAMRIGANKA RASA

(Vaidhya Chithamani : Kshaya Prakarana)

Drugs required :

	part
1. Purified mercury	.. 1
2. Purified sulfur	.. 1
3. Calx of gold	.. 1
4. Calx of pearls	.. 2
5. Calx of borax	.. 3
6. Sour kanjee (sufficient quantity)	
7. Common salt (sufficient quantity)	

Preparation :

Mix calx of gold with mercury and then add sulfur and grind. After a day's grinding add the rest (the two calxes) and grind for a day with the addition of sour kanjee. Dry the mass and bundle up in a cloth. Seal the cloth bundle all over with clay. After the clay is dry, keep the bundle in a pot with salt and cover with more salt. Heat on mild fire for a day and collect the medicine from the cloth bundle. Powder and store.

Action and uses :

Restorative and astringent. Useful in tuberculosis when given with bambaco manna, tinospora starch, pepper and liquorice powder. In enteropathies and tuberculosis it is given with Babbolarishta and Dasamoolarishta. Ghee is used as a vehicle.

Dose :

100 to 200 mg. Twice or thrice daily with butter, ghee or honey.

267. RAJAPRAVARTHANI VATI
(Bhaishajyaratnavali : Yonivyadhiadhikara)

Drugs required :

	part
1. Calx of borax	.. 1
2. Kaseesa bhasma	.. 1
3. Asafoetida	.. 1
4. Aloes	.. 1
5. Juice of aloes (some quantity)	

Preparation :

Grind 1 to 4 in 5 and make 500 mg. tablets or pills.

Action and uses :

Uterine tonic, Used in Amenorrhoea, and Dysmenorrhoea. Cleanses the urinogenital system and regulates menstrual flow and cycle. Used also along with Asokadivati and Asokarishta. Given also with a decoction of horse gram.

Dose :

1 tablet thrice daily.

268. RASA PARPATI

(Bhaishajya Rathnavali : Grahaniyadhikara)

Drugs required :

	part
1. Mercury	1
2. Sulfur	1
3. Jujube sticks (dry) sufficient quantity)	

Preparation :

Grind mercury and sulfur to make the black mass. Heat the black mass in an iron spoon on a fire of Jujube sticks. When molten, stir with a stick and pour on a plantain leaf placed on cow dung. Cover with another plantain leaf and place some more cow dung on that leaf. When the poured material has cooled and solidified, collect it and grind into a fine powder.

Action and uses :

Astringent, digestive, blood purifier, tonic and appetiser. Used in enteropathies, dysentery etc. with Dadimashtaka choorna or Jatheepthaladi choorna.

In loss of appetite, it is given with the powder of the three pungents.

In haemorrhoids it is given with Pippalyasava.

It is used in cases of constitutional debility with other suitable medicines.

Dose :

200 mg. twice or thrice daily.

269. RASABHOOPATHI RASA
(Bhasavarajeeya : Sopha Prakarana)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified aconite	1
4. Calx of iron	1
5. Calx of copper	1
6. Juice of Coldenia procumbens (some quantity) (Juice of maiden hair fern could also be used)	
7. Juice of ginger (some quantity)	

Preparation :

Grind mercury and sulfur to prepare black mass and then add the aconite and calxes of iron and copper and grind with the addition of the juice of Coldenia pro-

cumbens for three days. Dry the resultant and subject it to the glass flask-sandbath process and collect the sublimate. Grind it with ginger juice and prepare pills of 100 mg. weight.

Action and uses :

Digestive, haematinic, and expectorant. Used in coughs and bronchitis, with a decoction of lesser galangal and Adhatoda leaves or Vasarishta.

In dyspepsia and anaemia it is given with a powder of the three pungents.

Dose :

100 to 200 mg. per dose. Two or three times daily with ginger juice or honey.

**270. RECHANAVATI
(I.M.P.C.P.)**

Drugs required :

	gms.
1. Purified mercury	10
2. Purified sulfur	20
3. Black pepper	30
4. Dry ginger	50
5. Purified borax	40
6. Chebulic myrobalan (without seeds)	60
7. Rhubarb	660
8. Purified croton seeds	120
9. Lime juice (sufficient quantity)	

Preparation :

Grind mercury and sulfur until a soft black product results. Powder drugs 3 to 7 and add to this black material. Grind adding lime juice until a soft paste results. Add the seeds of croton and grind until the medicine is well ground, well mixed and fit for rolling into pills. Then make 50 mg. pills.

Action and uses :

Diuretic and purgative. Used in cases of ascites, oedema and constipation.

Dose :

1 to 3 pills with hot water.

271. SANKHA VATI

(Basavarajeeya : Ajeerna Prakarana)

Drugs required :

	parts
1. Ash of the testa of tamarind seeds ..	8
2. Ash of peepal tree bark ..	8
3. Ash of dog tongued milk hedge ..	8
4. Ash of prickly chaff flower ..	8
5. Ash of calotropis ..	8
6. The five salts each ..	8
7. Three myrobalans each (powder) ..	1
8. Calx of the sacred conch (shanka bhasma) ..	2
9. Cloves powder ..	2
10. Lime juice—sufficient quantity	

Preparation :

Grind the above drugs 1 to 3 with 10 for 7 days and make pills of 200 mg.

Action and uses :

Appetiser, digestive and antacid. Used in indigestion, dyspepsia, flatulence, gastric and duodenal ulcers with Ajamodarka or Bhaskaralavana.

Dose :

1 to 2 tablets twice daily.

272. SANNIPATHABHAIRAVA RASA (MAHA)
(Vaidhyachinthaamani : Sannipatha jwara prakarana)

Drugs required :

	parts
1. Black sulfide of mercury ..	2
2. Calx of copper ..	1
3. Calx of iron ..	1
4. Calx of mica ..	1
5. Calx of load stone ..	1
6. Juice of Coldenia procumbens (some quantity (Juice of maiden hair fern could also be used)	

(Black sulfide of mercury is here prepared by grinding 1 part of mercury with 1 part of sulfur).

Preparation :

Grind all the drugs with the juice and dry after a day. Keep the resultant in a glass flask and subject to sublimation on a sand bath with medium fire. When the process of sublimation is completed, allow to cool

and collect the medicine. Powder it and store. (Sometimes pills are made by grinding the sublimate with pig's bile).

Action and uses :

Antiperiodic, antitoxaemic. Useful in the treatment of all types of fevers including the malarial and typhoid.

Dose :

200 to 400 mg. per dose. Two or three times a day. Given with honey or Panchathicktharishta or tinospora decoction

273. SANNIPATHABHAIRAVA RASA (LAGHU)

(Basavarajeeya : Jwaraprakarana)

Drugs required :

	part
1. Purified yellow orpiment	1
2. Purified sulfur	1
3. Purified mercury	1
4. Purified red orpiment	1
5. Purified aconite	3
6. Purified cinnabar	8
7. Purified borax	1
8. Lime juice (sufficient quantity)	
9. Lead wort juice (sufficient quantity)	
10. Ginger juice (sufficient quantity)	

Preparation :

Grind mercury and sulfur for a day to prepare the black mass. Grind cinnabar with lime juice, add aconite and grind. Then add it to the black mass. Then add the rest of the drugs and grind well. When a greyish

color is attained by the material grind for three days with lime juice and finally for three days with ginger juice. Prepare 100 mg. pills.

Action and uses :

Used in the treatment of all types of fevers, especially in enteric group of fevers accompanied with diarrhoea.

Dose :

One to 3 pills per dose. Twice or thrice daily. Given with honey.

274. SEETAMSU RASA

(Vaidhya Chintamani : Sannipatha Jwara Prakarana)

Drugs required :

	parts
1. Purified red orpiment ..	1
2. Purified yellow orpiment ..	1
3. Three pungents powder (total) ..	2
4. Decoction of margosa bark (some quantity)	

Preparation :

Grind 1 to 3 in 4 for a week and make 100 mg. pills.

Action and uses :

Used in all types of fevers especially malarial fevers. It is given with honey, ginger juice and other vehicles. Useful also in coughs, bronchitis and other respiratory complaints.

Dose :

1 to 2 pills twice or thrice a day.

275. SINDOORA BHOOSHANA RASA

(Rasa Yoga Ratnakara : Chapter I)

Drugs required :

	part
1. Ekaguna sindoora ..	1
2. Calx of mica ..	1
3. Purified sulfur ..	1
4. Purified borax ..	1
5. Purple dhatura juice (some quantity)	
6. Lime juice (some quantity)	

Preparation :

Grind No. 1 with 5, add the other drugs one by one and grind with the addition of more juice for three days. Grind with 6 for 3 days. Make 100 mg. pills.

Action and uses :

Appetiser, digestive, and expectorant. Given in dyspepsia and indigestion with ginger juice. Given in coughs and bronchitis with Vasarishta. Given in hyperemesis or morning sickness in women with Draksharishta.

Dose :

1 to 2 pills twice or thrice a day with honey.

276. SOTHARI MANDOORA

(Bhaishajya Ratnavali : Sotha Adhikara)

Drugs required :

	part
1. Three myrobalans powders (each) ..	1
2. Three pungents powders (each) ..	1

	part
3. Cubebs root powder	1
4. Calx of dross iron	6
5. Cow's urine (sufficient quantity)	
6. Juice of negundo leaves (sufficient quantity)	
7. Ginger juice (sufficient quantity)	
8. Honey (sufficient quantity)	

Preparation :

Soak No. 4 in sufficient quantity of cow's urine. Add the drugs 1 to 3 and negundo juice and ginger juice. Grind well, add 8 parts by weight of cow's urine and boil until dehydration. Powder and mix with honey.

Some people use the juice of *Typhonium trilobatum* in addition to 6 and 7.

Action and uses :

Diuretic, haematinic and mildly laxative. Used in anaemia, jaundice, oedema and enlargement of liver and spleen. Given with a decoction of three myrobalans, turpith root, cassia pod, false calumba spreading hog weed and malabar tamarind.

Dose :

$\frac{1}{2}$ to 1 gm. twice daily with honey.

277. SOOLAKUTARAM

(Vaidhya Chinthamani : Soola Prakarana)

Drugs required :

	part.
1. Calx of borax	1
2. Calx of yellow orpiment	1
3. Calx of copper	1
4. Purified mercury	1
5. Purified sulfur	1
6. Powder of three myrobalans	1
7. Powder of three pungents	1
8. Purified aconite	1
9. Purified croton seeds	1
10. Eclipta prostrata juice (sufficient quantity)	

Preparation :

Grind mercury and sulfur to produce the black sulfide. Then add 2, 8 and 9 and then the other in succession and grind with the addition of Eclipta prostrata juice for three days and make 50 mg. pills.

Action and uses :

Digestive, carminative and mildly laxative. Used in the treatment of almost all the types of abdominal pains and colic. Used in indigestion and constipation. It may be given with a decoction of ajowan and cumin seeds or ginger juice. In constipation where a definite laxative effect is to be produced, it is given with a decoction of three myrobalans.

Dose :

1 to 2 pills twice or if necessary thrice daily with honey.

278. SOORYAVARTHI RASA (LAGHU)
(I.M.P.C.P.)

Drugs required :

	part
1. Purified cinnabar	1
2. Calx of mica	1
3. Calx of pearl oyster shells	1
4. Calx of copper pyrites	1
5. Cotton seeds	1
6. Cocculus indicus seeds or fruits*	1
7. Tinospora starch	1
8. Powder of cloves	1
9. Calx of borax	1
10. Raisins (for decoction some quantity)	
11. Ginger juice (some quantity)	
12. Lime juice (some quantity)	

Preparation :

Grind cinnabar with some lime juice and then add calxes of mica, pearls and copper pyrites and grind for a day. Add to this 5 and 6 and then the rest and grind with the addition of more lime juice for seven more days. Then grind for another seven days with the addition of a decoction of raisins. Prepare 100 mg. tablets.

Action and uses :

Digestive, carminative, expectorant and tonic. Used in dyspepsia, indigestion, vomiting and morning sickness, with honey. In coughs and bronchitis it is given with a decoction of cumin seeds and adhatoda leaves. Vasa-arishta is also given with this.

Dose :

1 tablet two or three doses per day.

* As the exact identity is a matter of controversy and as the drug is highly poisonous, it is omitted.

279. SOOTHIKABHARANA RASA
(I.M.P.C.P.)

Drugs required :

	part
1. Calx of mica	1
2. Calx of gold	1
3. Calx of vikranth	1
4. Calx of iron	1
5. Calx of copper	1
6. Calx of silver	1
7. Calx of lead	1
8. Calx of tin	1
9. Purified aconite	1
10. Purified mercury	1
11. Purified sulfur	1
12. Negundo leaf juice (some quantity)	
13. Eclipta prostrata juice (some quantity)	
14. Spreading hog weed juice (some quantity)	
15. False pareira brava juice (some quantity)	
16. Lead wort root juice (some quantity)	
17. Adhatoda leaf juice (some quantity)	
18. Tinospora juice (some quantity)	
19. Holy basil juice (some quantity)	
20. Calotropis root juice (some quantity)	
21. Datura leaf juice (some quantity)	
22. Indian globe flower juice (some quantity)	
23. Lime juice (some quantity)	
24. Gloriosa juice (some quantity)	
25. Indian aloe juice (some quantity)	
26. Bitter gourd leaf juice (some quantity)	
27. Gall bladder of fish (small quantity)	
28. Gall bladder of porcupine or pig (small quantity)	
29. Gall bladder of tortoise (small quantity)	

30. Gall bladder of buffalo (small quantity)
31. Gall bladder of peacock (small quantity)
32. Gall bladder of cobra (small quantity)
33. Gall bladder of domestic fowl (small quantity)
34. Gall bladder of goat (small quantity)
35. Gall bladder of elephant (small quantity)
36. Gall bladder of horse (small quantity)
37. Gall bladder of pigeon (small quantity)
38. Gall bladder of crocodile (small quantity)
39. Gall bladder of varanus (vudumbu-Tamil) (small quantity)

Preparation :

First grind mercury and sulfur and prepare the black mass. Add aconite and grind well. Then add the other calxes to this and grind, with the addition of the juices mentioned, for 12 hours with each. Dry the resultant and subject to the glass flask—sand bath treatment with moderate fire. Collect the sublimate and grind with the gall bladders listed and prepare 100 mg. pills, or powder and store.

Action and uses :

Antitoxaemic, antimicrobial and tonic. Useful in cases of typhoids, puerpural infections and tetanus etc.

Dose :

100 to 200 mg. per dose. Given with honey. Coconut water and curd must be liberally used when under treatment.

280. SWARNAMUKTHAADIHI GUTIKA

(Sahasrayoga : Gutika Prakarana)

Drugs required :

	part
1. Calx of gold ..	1
2. Calx of pearls ..	1
3. Calx of silver ..	1
4. Calx of corals ..	1
5. Calx of antlers of deer ..	1
6. Musk ..	1
7. Saffron ..	1
8. Bezoar ..	1
9. Cloves ..	1
10. Rosary nuts ..	1
11. Mahua flowers ..	1
12. Bael fruit pulp ..	1
13. Costus root ..	1
14. Date fruits ..	1
15. Margosa seed kernels ..	1
16. Raisins ..	1
17. Sweet flag ..	1
18. Long pepper ..	1
19. Seeds of spurious wild olive* (Puth- rajniva seeds) ..	1
20. Clearing nuts ..	1
21. Sirish (Albizzia) flowers ..	1
22. Sweet smelling hare foot ..	1
23. Roots of butterfly pea—white ..	1
24. Prickly chaff flower roots ..	1
25. Roots of spreading hog weed white ..	1
26. Honey or Human breast milk (some quantity) ..	1

* Not used as identity in contraverted.

Preparation :

Powder all the drugs and grind with honey. Make 50 mg. pills.

Action and uses :

Cardiac tonic, stimulant and expectorant. Given to tone up the respiratory and circulatory systems. Useful in the diseases of chest in general.

Dose :

1 to 2 pills per dose. Given with honey or Dasamoolarishta.

231. SWARNAKANTHA VALLABHA RASA
(Ayurveda Oushadha Rathnakara)

Drugs required :

	parts
1. Purified mercury	69
2. Purified sulfur	69
3. Calx of lead stone	16
4. Calx of iron	14
5. Calx of dross iron	12
6. Calx of borax	10
7. Purified red orpiment	8
8. Asphalt (Bituminous momia)	6
9. Calx of gold	1
10. Calx of silver	2
11. Lime juice (some quantity)	

Preparation :

Grind 1 and 2 and then add the rest of the drugs one by one in order and grind, with the addition of lime juice. When grinding is complete, dry the mass, powder

and subject it to the sand bath sublimation process. When the process is completed collect the contents of the flask and grind with lime juice to make 125 mg. pills.

Action and uses :

Vi'taliser, haematinic and expectorant. Used in cases of tuberculosis, coughs, bronchitis and anaemia.

Dose :

200 to 400 mg. with honey. Twice daily.

282. SWARNAKRAVYADHI RASA

(Vaidhya Chinthaamani : Ajeerna Prakarana)

Drugs required :

	part
1. Calx of lead stone ..	1
2. Calx of go'd ..	1
3. Calx of copper ..	1
4. Calx of silver ..	1
5. Calx of conch shell ..	1
6. Calx of iron ..	1
7. Citron juice (sufficient quantity)	
8. Purified mercury ..	4
9. Purified sulfur ..	3
10. Ma'abar tamarind juice (some quantity)	
11. Jujube fruit juice (some quantity)	
12. Lime juice (some quantity)	
13. Pomogranate juice (some quantity)	
14. Yellow wood sorrel juice (some quantity)	
15. Decoction of five spices (some quantity)	
16. Calx of borax ..	13
17. Five salts (total) ..	9
18. Black pepper powder ..	45
19. Bengal gram (sufficient quantity)	

Preparation :

Grind 1 to 6 with some citron juice and put into an iron container. Prepare the black mass by grinding mercury and sulfur and add it to this. Heat the mixture to dehydrate and then cool. Then grind the material with juices of Malabar tamarind, jujube fruit, lime fruit, pomegranate fruit, yellow wood sorrel and the decoction of five spices. Add an equal quantity of calx of Borax to this and half the quantity of five salts. Add to this as much powder of black pepper. Grind this mixture with sour water obtained by soaking bengal gram, for 21 days. Make 125 mg. pills.

Action and uses :

Appetiser, digestive, carminative, antacid and haematinic. Indicated in indigestion, dyspepsia, vomiting, gastric and duodinal ulcers with rock salt, butter milk and ginger juice. In anaemia it is given with Draksharishtha or Lohasava.

Dose :

100 to 400 mg. per dose. Two doses per day with honey.

283. SWARNAMALINEE VASANTHA RASA

(Rasa Yoga Rathnakara : Chapter 4)

Drugs required :

	part
1. Calx of gold	1
2. Calx of pearls	2
3. Purified cinnabar	3
4. Powder of black pepper	4
5. Purified native calamine	8
6. Butter (some quantity)	
7. Margosa bark (some quantity)	

Preparation :

Grind 1 and 3. Add 2, 5 and 4. Grind with butter into a soft paste. Then grind with the decoction of margosa bark until the greasy texture is lost. Bring to consistency and make pills of 100 mg. weight.

Action and uses :

Digestive, and aphrodisiac. Used in chronic fevers, pthisis, coughs and bronchitis with tinospora starch, arrow root, long pepper powder, honey and Draksharishta and Chyavanaprasha lehya.

Dose :

1 pill. Two or three times daily.

284. SWARNA VANGA
(I.M.P.C.P.)

Drugs required :

	parts	gms.
1. Purified mercury	8	80
2. Purified sulfur	8	80
3. Purified tin	8	80
4. Purified sal ammoniac	8	80
5. Purified alumn	3	30

Preparation :

Melt tin. When molten, remove from fire and add mercury with stirring. Wash the mixture, add sulfur and grind. Then add sal ammoniac and alumn and grind into a soft mass. Seal in a capsule made with two enamelled iron bowls or put in a glass flask and subject to heating on the sand bath for 8 hours or until the process is over. Cool the set up and collect the medicine and powder.

Action and uses :

Vitaliser, and sedative of the urinogenital system. Used in diabetes. It is given in gonorrheal urethritis with sugar and juice of *Phyllanthus niruri*. In diabetes it is given with other suitable medicines.

Dose :

200 to 400 mg. per dose. Two doses daily. It is given with butter.

285. SWARNA VATA RAKSHASA
(I.M.P.C.P.)

Drugs required :

	part
1. Calx of gold	1
2. Calx of iron	1
3. Calx of load stone	1
4. Calx of conch shell	1
5. Calx of lead	1
6. Calx of copper	1
7. Calx of copper pyrites	1
8. Calx of cowrie shells	1
9. Calx of mica	1
10. Calx of tin	1
11. Calx of silver	1
12. Ekaguna sindoora	1
13. Purified yellow orpiment	1
14. Purified red orpiment	1
15. Purified borax	1
16. Purified native calamine	1
17. Purified copper sulfate	1
18. Purified aconite	1

	part
19. Purified croton seeds	1
20. Purified cinnabar	1
21. Purified sulfur	1
22. Ginger juice (sufficient quantity)	
23. Decoction of cloves (sufficient quantity)	
24. Decoction of lead wort roots (sufficient quantity)	

Preparation :

Grind cinnabar and sulfur to make a black mass. Then add the rest of the drugs and grind with the addition of 22, 23 and 24 for a day with each. Roll into small lumps and dry. Subject to the sandbath treatment and heat for 6 hours, on light fire. When the process of formation of sub'imate is completed, cool the set up and collect the contents of the flask. Powder and keep.

Action and uses •

Useful in all types of paraplegia, hemiplegia, facial paralysis and allied disorders of the nervous system. Also in rheumatic pains.

Dose :

100 to 200 mg. per dose. Two or three doses per day. Given with honey.

286. SWACHANDA BHAIRAVA RASA

(Rasayoga Ratnakara : Chapter I)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified aconite	1
4. Nut meg powder	$\frac{1}{2}$
5. Long pepper powder	$1\frac{1}{4}$
6. Fresh betle leaves (some quantity)	
7. Fresh ginger (some quantity)	
8. Flowers of white dead nettle (some quantity)	

Preparation :

Grind 1 and 2 into a black mass, add aconite and grind with some juice extracted from 6. Grind and add the other drugs 4 and 5 and continue grinding. When all the drugs are thoroughly mixed grind for 1 day in the juice of 6, 7 and 8. Make 50 mg. pills.

Action and uses :

Digestive, carminative, astringent and expectorant. Used in indigestion, dyspepsia, coughs, colds, bronchitis, fevers, diarrhoea and enteritis.

Dose :

1 to 2 pills twice or thrice a day. With honey.

287. SWASAKUTARAM

(Vaidhya Chintamani : Swasa Prakarana)

Drugs required :

	part
1. Purified mercury ..	1
2. Purified sulfur ..	1
3. Purified aconite ..	1
4. Purified borax ..	1
5. Purified red orpiment ..	1
6. Powders of black pepper ..	3
7. Powders of three pungents (each) ..	2
8. Fresh juice from adhatoda leaves (sufficient quantity)	
9. Fresh juice from jacquins night shade (sufficient quantity)	

Preparation :

Grind 1 and 2, add 3 to 7 in powder form and grind for 3 days in 8 and 3 days in 9. Make 100 mg. pills.

Action and uses :

Expectorant, digestive and mildly stimulant. Used in coughs and bronchitis. It is given with Vasakantakari lehya, Vasa arishta or Kanakasava.

Dose :

1 to 2 pills twice or thrice daily with honey.

288. SWASANANDA GUTIKA
(Arogya Kalpa Druma : Gutika Prakarana)

Drugs required :

	part
1. Purified cinnabar	1
2. Purified aconite	1
3. Pure camphor	1
4. Three myrobalans (some amount)	

Preparation :

Prepare a decoction of 4. Grind aconite with the decoction into a paste. Grind cinnabar with the same decoction, add camphor and make a paste. Then mix the two pastes and grind to consistency. Make 100 mg tablets

(Some people grind cinnabar with lime juice).

Action and uses :

Expectorant stimulant. Used in coughs, colds, and bronchitis. Given with decoction of black pepper or cumin seeds or juice of holy basil or a paste of lesser galangal.

Dose :

1 to 2 tablets twice or thrice daily.

289. THARUNARKA RASA
(Bhanshajya Ratnavali : Jwara Prakarana)

Drugs required :

	part
1. Purified cinnabar	8
2. Purified sulfur	1
3. Calx of mica	1
4. Calx of tin	1
5. Black cobra venom	1
6. Purified aconite	1
7. Purified borax	1
8. Purified datura seeds	1
9. Red sanders powder	1
10. Lime juice (sufficient quantity)	

Preparation :

Grind cinnabar with lime juice and then add the rest of the drugs one by one in order and continue grinding with the addition of more lime juice for 3 days. Make 50 mg. pills.

Action and uses :

General stimulant. Cardiac tonic and expectorant. Useful in cases of heart weakness and allied states with coma.

Dose :

Just one pill with honey.

Important Note :

The preparation contains cobra venom. There should be no wounds or scratches on the hands of the person handling the preparation. This medicine should not be administered to those persons having wounds or ulcers in the mouth or throat.

290. THARAKESHWARA RASA
(Basava Rajeeya : Pramehadhikara)

Drugs required :

	part
1. Ekaguna sindoora	1
2. Calx of tin	1
3. Calx of iron	1
4. Calx of mica	1
5. Honey (sufficient quantity)	

Preparation :

Grind 1 to 4 in 5 for a day and make pills of 100 mg. Usually without honey, a powder is made and stored.

Action and uses :

Vitaliser, and antidiabetic. Given in cases of diabetes with tinospora starch, emblic myrobalan and madder.

Dose :

200 mg. to 400 mg. twice or thrice daily with some honey and also edible figs.

Diet restrictions :

When under treatment, use green gram, emblic myrobalan and butter milk.

291. VAMANAMRITHA

(Yoga Rathnakara : Chardiogadhikara)

Drugs required :

	part
1. Purified sulfur	1
2. Calx of antlers of deer	1
3. Calx of borax	1
4. Bezoar	2
5. Purified bituminous (Momia) Asphalt	1
6. Bamboo manna	1
7. Powder of rosary nuts	1
8. Powder liquorice	1
9. Powder of lotus seed kernels	1
10. Powder of sandal wood	1
11. Decoction of bael roots (sufficient quantity)	

Preparation :

Grind 1 and 5 for three hours and add 4 and then 2 and 3. Grind well and then add the rest one by one and grind with decoction of bael roots for three hours. Make 50 mg. pills.

Action and uses :

Appetiser and digestive. Checks vomiting. Used in nausea and vomiting. Given in loss of taste and dyspepsia. In these cases it is given with Mathulunga rasayana.

Dose :

1 pill. Twice or thrice daily with honey or Mathulunga rasayana.

292. VASANTHA KUSUMAKARA

(Basavarajeeya : Pramehadhikara)

Drugs required :

	parts
1. Ekaguna sindoora	4
2. Calx of gold	2
3. Calx of mica	4
4. Calx of silver	2
5. Calx of tin	3
6. Calx of lead	3
7. Calx of load stone	3
8. Calx of corals	4
9. Calx of pearls	4
10. Cow's milk (sufficient quantity)	
11. Sugarcane juice (sufficient quantity)	
12. Decoction of adhatoda leaves (sufficient quantity)	
13. Decoction of sandal wood (sufficient quantity)	
14. Decoction of vetiver roots (sufficient quantity)	
15. Decoction of black vetiver roots (sufficient quantity)	
16. Decoction of turmeric (sufficient quantity)	
17. Juice of banana rhizome (sufficient quantity)	
18. Juice of lotus flower (sufficient quantity)	
19. Juice of jasmine flowers (sufficient quantity)	
20. Musk	

Preparation :

Grind 1, 2 and 3 for three hours. Add to those 4 to 9 and grind with the liquids 10 to 19 in order for 7 days with each. Finally add musk and grind. Make 100 mg. pills.

Action and uses :

Vitaliser and aphrodisiac. Used in diabetes mellitus and insipidus, pthisis, loss of weight, emaciating diseases and nervous debility. It is used as a haematinic. Given in sexual neurasthenia and impotency with other medicines.

Dose :

1 to 2 pills twice or thrice daily.

293. VATHAVIDHWAMSINI RASA

(Basavarajeeva : Vathaprakarana)

Drugs required :

	part
1. Purified mercury	.. 1
2. Purified sulfur	.. 1
3. Calx of lead	.. 1
4. Calx of tin	.. 1
5. Calx of iron	.. 1
6. Calx of copper	.. 1
7. Calx of mica	.. 1
8. Calx of borax	.. 1
9. Long pepper powder	.. 1
10. Black pepper powder	.. 1
11. Powder of dry ginger	.. 1
12. Powder of purified aconite	.. 4½

13. Decoction of three peppers (some quantity)
14. Decoction of three myrcabalans (some quantity)
15. Decoction of lead wort root (some quantity)
16. *Eclipta prostrata* juice (some quantity)
17. *Negundo* leaf juice (some quantity)
18. Ginger juice (some quantity)
19. *Adhatoda* leaf juice (some quantity)
20. Juice of Indian hemp leaves (some quantity)
21. Juice of lime fruits (some quantity)
22. *Costus* root decoction (some quantity)

Preparation :

Grind mercury and su'fur and then add the rest of the drugs 3 to 12 and grind. Continue grinding for 3 days with each of 13 to 22. Finally make 100 mg. pills.

Action and uses :

Digestive, antitoxaemic, expectorant, astringent and nervine tonic. Used in nervous disorders, fevers, enteropathies and puerpural infections.

Dose :

200 to 400 mg. twice or thrice daily with honey.

294. VATAGNIKUMARA BASA
(I.M.P.C.P.)

Drugs required

	parts
1. Purified mercury	2
2. Purified sulfur	2
3. Purified yellow orpiment	1

Preparation :

Grind 1 and 2 into a black mass, add 3 and grind well. Prepare the sublimate by the sand bath method by heating for 3 days on light, medium and intense fire. Collect sublimate, powder and preserve.

Action and uses :

Expectorant and vitiliser. Used in respiratory disorders, coughs bronchitis and fevers. Given with Kar-pooradi choornam or powder of three pungents and honey.

Dose :

30 to 120 mg. twice daily.

295. VATAGAJANKUSA
(I.M.P.C.P.)

Drugs required

	parts
1. Purified mercury	8
2. Purified sulfur	8
3. Purified nux vomica seeds	8
4. Powder of three pungents (total)	3
5. Powder of three myrobalans (total)	3
6. Lime juice (some quantity)	

Preparation :

Grind 1 and 2 for three hours, add the other drugs and grind with lime juice to consistency. Make 50 mg. pills.

Action and uses :

Nervine tonic, antiinfective and sedative. Digestive and carminative. Used in nervous disorders, chronic indigestion etc. Usually given with a decoction of black pepper, cumin seeds or ginger juice. Given in paraplegia and hemiplegia. Useful in facial paralysis also.

Dose :

1 to 2 pills twice or thrice a day.

296. VATARAKSHASA

(Valdhyachintamani : Vataprakarana)

Drugs required

	part
1. Calomel purified	1
2. Purified sulfur	1
3. Calx of lead stone	1
4. Calx of mica	1
5. Calx of copper	1
6. Juice of spreading hog weed (some quantity)	
7. Juice of tinospora (some quantity)	
8. Juice of lead wort (some quantity)	
9. Juice of holy basil (some quantity)	
10. Decoction of three pungents (some quantity)	

Preparation :

Grind 1 and 2 and then add 3, 4 and 5. Grind well the mixture with 6 to 10 separately for 3 days in each. Dry the product and calcine in earthen discs with 25 cow dung cakes. Open the capsule collect the medicine grind with water and make 60 mg. pills.

Action and uses :

Stimulant, expectorant and nervine tonic. Used in nervous diseases, paralysis, arthritis and rheumatic pains.

Dose :

100 to 200 mg. with honey ; twice or thrice daily.

297. YOGARAJA GUGGULU

(Sarangadhara Samhita : Madhyama Kanda)

Drugs required

	part
1. Powder of five spices (each)	1
2. Fried asafoetida	1
3. Powder of ajowan seeds	1
4. Powder of cumin seeds	1
5. Powder of nigella seeds	1
6. Powder of Piper arantiacus fruits	1
7. Powder of tellicherry seeds	1
8. Powder of mustard seeds	1
9. Powder of false pareira brava	1
10. Powder of embelia fruits	1
11. Powder of large long pepper	1
12. Powder of picirrhiza powder	1
13. Powder of atees	1
14. Powder of beetle killer root	1
15. Powder of sweet flag	1
16. Powder of bow string hemp	1
17. Powder of three myrobalans (total)	40
18. Purified bdellium	60
19. Calx of tin	16
20. Calx of silver	16
21. Calx of lead	16
22. Calx of iron	16
23. Calx of mica	16
24. Calx of dross iron	16
25. Ekaguna sindoora	16
26. Ghee (some quantity)	

Preparation :

Grind 1 to 25 into a fine paste. Adding traces of 26, for rolling pills, make 500 mg. pills.

Action and uses :

Used in all nervous disorders, chronic infections, rheumatism, arthritis, fistula and scrofula and nervous debility.

Dose :

1 to 2 pills two or three times daily. Given with Saribadiyasava.

ADDITIONAL PREPARATIONS

1. KSHEERA PIPPALI

Drugs required :

	part
1. Long pepper ..	1
2. Latex of square spurge ..	3

Preparation :

Make coarse powders of long pepper and subject to soaking and grinding in the latex for 7 days or until all the latex is used up and a fine paste of pill making consistency is reached. Press into 500 milligramme tablets

Action and Uses :

Appetiser, expectorant, antipyretic and mildly laxative. Indicated in loss of appetite, cough, dyspnoea, pyrexia and enlargement of the liver and spleen.

Dose :

1 to 2 tablets a day. Given with honey.

2. NARIKELA LAVANA

(Bhaishajyaratnavali : Soolarogadhikara)

Drugs required :

1. A ripe coconut
2. Sufficient rock salt to fill the cavity in the coconut.

Preparation :

Take the coconut and completely dehusk. Then make a hole in one of its eyes. Fill in the rock salt and seal the aperture. Wind a clay smeared cloth ribbon over the coconut to completely cover it. Put the coconut in a small cowdung kiln and burn. Then take the coconut when it has cooled on its own accord and carefully open. Recover the contents inclusive of the kernal, power and preserve.

Action and Uses :

Indicated in colic.

Dose :

One gramme with butter milk.

3. PANCHAKAKARA CHOORNA (Siddha bhesaja manimala)

Drugs required :

		Part
1. Dry ginger	..	1
2. Fennel seeds	..	1
3. Senna pods	..	1
4. Rock salt	..	1
5. Rind of chebulic myrobalan	..	1

Preparation .

Finely comminute the drugs, sieve and mix to homogeneity. Preserve as powder.

Action and Uses :

Mildly laxative and corrective of abdominal obstructions. Indicated in constipation, abdominal bloating, indigestion and colic.

Dose :

5 to 12 grammes, mixed with honey.

4. SAMUDHRADI CHOORNA

(Bhaishajya Ratnavali : Udararogadhikara)

Drugs required :

		part
1. Common salt	..	1
2. Sochal salt	..	1
3. Rock salt	..	1
4. Black salt	..	1
5. Carbonate of potash	..	1
6. Ajowan seeds	..	2
7. Long pepper	..	1
8. Dry ginger	..	1
9. Lead wort root	..	1
10. Asafoetida	..	1

Preparation :

Fry and finely powder drugs 1 to 5 and 10. Powder other drugs without frying. Thoroughly mix all the powders and store.

Action and Uses :

Appetiser and carminative. Indicated in loss of appetite, colic, ascitis and abdominal tumors.

Dose :

2 to 4 grammes. Given along with some butter milk or hot water.

5. SRINGYADI CHOORNA

(Sarangadhara Samhita : Madhyamakhandā)

part

Drugs required :

1. Chinese galls	..	1
2. Atis roots	..	1
3. Long pepper	..	1

Preparation :

Finely powder the drugs and store after sieving.

Action and Uses :

Expectorant and antipyretic. Indicated in coughs, fever and vomiting in children.

Dose :

2 gms. with honey.

6. CHITRAKA GUTIKA

(Bhaishajyaratnavali : Grahani Adhikara)

Drugs required :

		part
1. Lead wort root	..	1
2. Long pepper root	..	1

3. Two alkalies (each)	..	1
4. Five salts (each)	..	1
5. Three pungents (each)	..	1
6. Fried asafoetida	..	1
7. Ajowan seeds	..	1
8. Black pepper roots	..	1
9. Juice of citron or lime fruits	..	60

Preparation :

Finely comminute drugs 1 to 8. Soak and grind with 9 until all the juice is used up. Compress into 500 mg. tablets after bringing to consistency by continued grinding.

Action and Uses :

Appetiser and corrective of the functions of the digestive tract. Indicated in loss of appetite, colic abdominal tumors and in chronic diarrhoea.

Dose :

1 to 4 tablets.

7. BAHUSALA GUDA

(Bhaishajya Ratnavali : Arsarogadhikara)

Drugs required :

		gms.
1. Turpith root	..	50
2. Staff tree seeds	..	50
3. Cotton roots	..	50
4. Lead wort roots	..	50

5.	Small caltrops	..	50
6.	Camphor zedeary	..	50
7.	Colocynth	..	50
8.	Nut grass tubers	..	50
9.	Dry ginger	..	50
10.	Embelia fruits	..	50
11.	Chebulic myrobalans	..	50
12.	Purified marking nuts	..	400
13.	Black musale (subst. for Elephant creeper)	..	300
14.	Elephant foot yam	..	800
15.	Turpith roots	..	100
16.	Staff tree seeds	..	100
17.	Elephant foot yam	..	100
18.	Lead wort root	..	100
19.	Cardamoms	..	300
20.	Cinnamon bark	..	100
21.	Black pepper	..	300
22.	Large long pepper	..	300
23.	Jaggery	(kgs.) ..	19
24.	Water	(litres) ..	25

Preparation :

Prepare a decoction by boiling drugs 1 to 14 in the given amount of water and reduce to $\frac{1}{4}$. Add jaggery to filtered decoction and bring to consistency by slow boiling. Add fine powders of remaining drugs and mix to lehya consistency.

Action and Uses :

Appetiser, mildly laxative, diuretic and anthelmintic. Indicated in loss of appetite, ascitis, piles, abdominal tumors and constipation.

Dose :

5 to 10 gms.

8. BHARNGI GUDA

(Bhaishajya Ratnavali : Hiccawasadhikara)

Drugs required :

		Kgs.
1. Bettle killer root	..	5
2. Ten roots-total	..	5
3. Chebulic myrobalans	(nos.) ..	100
4. Water	(liters) ..	60
5. Jaggery	..	5
		gms.
6. Honey	..	300
7. Three pungents-total	..	150
8. Three aromatics-total	..	150
9. Carbonate of potash	..	25

Preparation .

Boil 1, 2, 3 and 4 and reduce decoction to $\frac{1}{4}$. Filter and take clear decoction. Collect the cooked chebulic myrobalans and take their flesh and make a paste. Add this paste and jaggery to the decoction and boil to consistency and add powders of 7, 8 and 9. Mix into lehya. Allow to cool and mix with honey.

Action and Uses :

Carminative and expectorant. Useful in loss of appetite, coughs and dyspnoea.

Dose :

Upto 25 gms.

9. CHITRAKA HAREETAKI

(Charakadatta : Nasarogadhikara)

Drugs required :

		litres
1.	Decoction of lead wort root *	5
2.	Decoction of Emblic myrobalans	5
3.	Decoction of Tinospora stem	5
4.	Decoction of Ten roots	5
		kgs.
5.	Jaggery	5
6.	Powder chebulic myrobalans	3.2
		gms.
7.	Powder of three pungents-total	300
8.	Cinnamon bark powder	100
9.	Cinnamon leaf powder	100
10.	Cardamoms powder	100
11.	Carbonate of potash	25
12.	Honey	400

Decoctions are prepared by boiling 5 kg. of drug with 20 litres of water reduced to $\frac{1}{4}$.

Preparation :

Boil 1 to 5 into a syrup and add 6 and mix. Heat with mixing until a plastic mass is obtained. Add 7 to 11 in fine powder form and mix well. Stop heating, remove from oven and mix with honey, when cool.

Action and Uses :

Digestive, carminative and expectorant. Indicated in loss of appetite, tuberculosis, coughs, chronic catarrh and lower abdominal obstructions.

Dose :

6 to 12 gms.

10. HARIDRA KHANDA

(Bhaishajya Ratnavali : Seetapittaadhikara)

Drugs required :

		kgs.
1.	Turmeric	1.600
2.	Turpith root	1.600
3.	Chebulic myrobalans (without seed)	1.600
		gms.
4.	False calumba stem	50
5.	Nut grass tubers	50
6.	Ajowan fruits	100
7.	Lead wort root	50
8.	Picrorrhiza	50
9.	Cumin seeds	50
10.	Long pepper	50
11.	Dry ginger	50
12.	Cinnamon bark	50
13.	Cinnamon leaves	50
14.	Cardamoms	50
15.	Embelia fruits	50
16.	Tinospora stem	50
17.	Adhatoda roots	50
18.	Costus roots	50
19.	Three myrobalans-total	150
20.	Black pepper root	50
21.	Coriander	50
22.	Calx of iron	50
23.	Calx of mica	50
24.	Sugar	16

Preparation :

Prepare sugar syrup. Add powders of 1, 2 and 3 and stir well until mixed and partially cooked maintaining plastic consistency. Then add the rest of the drugs and

mix well. Stop heating and when it comes to lehya consistency, allow to cool.

Action and Uses :

Mild laxative. Indicated in Ascitis, urticaria, urticarial rashes and itches.

Dose :

6 to 12 gms.

11. HAREETAKI KHANDA

(Bhaishajya Ratnavali : Soola Rogadhikara)

Drugs required :

	gms
1. Powder of three myrobalans—total ..	300
2. Powder of four aromatics—total ..	400
3. Powder of ajowan seeds ..	100
4. Powder of three pungents—total ..	300
5. Dill seeds ..	100
6. Fennel seeds powder ..	100
7. Coriander powder ..	100
8. Cloves powder ..	100
9. Nut grass tuber powder ..	100
10. Turpith root powder ..	800
11. Senna leaves powder ..	800
12. Coarse powders of chebulic myrobalans ..	3200
13. Sugar (kgs.) ..	12.8

Preparation :

Prepare sugar syrup. Add all the drugs in fine powder form and mix to lehya consistency and store.

Action and Uses :

Antacid, expectorant, laxative and carminative. Indicated in hyper acidity, colic, dyspnoea, cough, constipation and loss of appetite.

Dose :

6 to 12 gms.

12. SUKUMARA RASAYANA

(Ashtanga Hridya : Vidradhi Vriddhi Chikitsa)

Drugs required :

		gms
1.	Spreading hogweed roots	900
2.	Ten roots (total)	90
3.	Leptadenia reticulata stem	90
4.	Withania roots	90
5.	Castor roots	90
6.	Asparagus roots	90
7.	Paddy roots	90
8.	Bamboo roots	90
9.	Sugar cane roots	90
10.	Wild sugar cane roots	90
11.	Cotton grass roots	90
12.	Indian globe flower	90
13.	Water	(litres) 30
14.	Jaggery	900

		gms.
15.	Cow's milk	600
16.	Cow's ghee	600
17.	Castor oil	600
18.	Long pepper	15
19.	Long pepper roots	15
20.	Pock salt	15
21.	Glycyrrhiza	15
22.	Raisins	15
23.	Ajowan fruits	15
24.	Dry ginger	15

Preparation :

Prepare decoction of 1 to 12 in water. To filtered decoction, add jaggery and cow's milk and boil to consistency. Mix 16 and 17 with it. Then add the powders of drugs 18 to 24 and store.

Action and Uses :

Diuretic, stimulant of the urinogenital system and mildly laxative. Indicated in colic, abdominal tumors, constipation and diseases of the urinogenital system. Taken during late pregnancy, aids normal easy delivery.

Dose :

3 to 12 grams.

13. VYOSHADI GUTIKA

(Sarangadhara Samhita : Madhyamakhandā)

Drugs required :

		gms.
1.	Three pungents each	12.5
2.	Malabar tamarind	12.5

3. Black pepper root	..	12.5
4. Himalayan silverfir leaves	..	12.5
5. Lead wort root	..	12.5
6. Cumin seeds	..	12.5
7. Tamarind pulp	..	12.5
8. Cardamoms	..	3.25
9. Cinnamon bark	..	3.25
10. Nagkeshar stamens	..	3.25
11. Sugar	..	250

Preparation :

Powder all the drugs and mix thoroughly and compress into tablets of 500 mg. weight.

Action and Uses :

Expectorant and carminative. Indicated in chronic catarrh, cough and asthmatic affections and in bronchitis.

Dose :

1 to 2 tablets.

14. KUEJA PRASARINI TAILA

(Bhaishajya Ratnavali : Vatarogadhikara)

Drugs required :

		kg.
1. Field bind weed decoction *	..	12.8
2. Sesame oil	..	12.8
3. Sour kanji	..	12.8
4. Cow's milk	..	25.6
5. Cow's curd	..	12.8
6. Lead wort root	..	100

		gms.
7.	Purified marking nuts	100
8.	Long pepper roots	100
9.	Mahua flowers	100
10.	Rock salt	100
11.	Sida roots	100
12.	Dill seeds	100
13.	Himalayan cedar wood	100
14.	Lesser galangal	100
15.	Large long pepper	100
16.	Field bind weed roots	100
17.	Indian spike nard	100

The decoction is prepared by boiling 5 kg. of dry drug with 51.2 litres of water, until reduced to $\frac{1}{4}$.

Preparation :

Make a fine paste of drugs 6 to 17. Add this to the mixture of 1 to 5. Put in a vessel and boil until all the water is evaporated. Strain and filter to recover the oily portion.

Action and Uses :

Anti rheumatic. Indicated in all kinds of rheumatic pains. For external use only.

15. MARICHADI TAILA

(Bhaishajya Ratnavali : Kushtadhikara)

Drugs required :

		gms.
1.	Black pepper	25
2.	Yellow orpiment	25

		gms.
3.	Red orpiment	25
4.	Nut grass tubers	25
5.	Calotropis latex	25
6.	Oleander roots	25
7.	Black turpith	25
8.	Cow dung	25
9.	Colocynth	25
10.	Costus roots	25
11.	False calumba stem	25
12.	Turmeric	25
13.	Sandal wood	25
14.	Himalayan cedar wood	25
15.	Aconite—purified	50
16.	Mustard oil	800
17.	Cow's urine	3200

Preparation :

Convert drugs 1 to 15 into a fine paste. Add to a mixture of 16 and 17. Boil until dehydrated. Recover oil and store.

Action and Uses :

Antibiotic. Used in the treatment of ring worm and other fungal infections and leucoderma and leprosy. For external application only.

16. SHADBINDU TAILA

(Bhaishajya Ratnavali : Siro rogadhikara)

Drugs required :

		gms.
1. Castor roots	..	10
2. Indian valerian	..	10
3. Leptadenia stem	..	10
4. Dill seeds	..	10
5. Lesser galangal	..	10
6. Rock salt	..	10
7. Eclipta herb	..	10
8. Embelia fruits	..	10
9. Glycyrrhiza	..	10
10. Dry ginger	..	10
11. Sesame oil	..	800
12. Goat's milk	..	800
13. Eclipta juice	(litres) ..	3.2

Preparation :

Make a paste of 1 to 10 and boil with a mixture of 11, 12 and 13 until dehydrated. Recover and filter oil.

Action and Uses :

Useful in diseases of the head. To be used as nasal drops. Up to 6 drops.

17. VISHAGARBHA TAILA

(Bhaishajya Ratnavali : Vatrogadhikara)

Drugs required :

		gms.
1.	Sesame oil	3200
2.	Indian Madder	200
3.	Turmeric	50
4.	Lodh tree bark	50
5.	Three myrobalans (each without seeds)	50
7.	Fragrant screw pine flower	50
8.	Aerial roots of banyan	50
9.	Black vetiver	50
10.	"Nalika" (Botanical identity not established)	50
		litres:
11.	Water	12.8
12.	Datura leaf juice	1.0
13.	Sour kanjee	3.2
		gms.
14.	Costus root	93.75
15.	Sweet flag	93.75
16.	Hriddhatree (botanical identity not established)	28.25
17.	Black pepper	28.25
18.	Purified aconite	18.75
19.	Datura seeds	84.375
20.	Rock salt	84.375

Preparation :

Heat sesame oil until it evaporates with fumes. (Take care that it does not catch flames.) Put into it coarse powders of drugs 2 to 10 and mix. Reduce fire

in the oven. Slowly add 3.2 litres of water to this oil-drug mixture with stirring. Then add the remaining 9.6 litres of water. Remove from oven and pour the whole thing into a vessel. Vigorously stir the oil-water mixture until the oil is dispersed in water. Close and set aside for a fortnight. Then decant and filter the oil, discarding water. Mix this processed oil with 12 and 13. Heat in a vessel, with a paste of drugs 14 to 20, until dehydrated. Then allow to cool. Filter, take the oil and store.

Action and Uses :

Antirheumatic and anticonvulsant. For external application only, in the treatment of nervous diseases, paralysis, shaking palsy and body aches.

18. RASA MANIKYA (Rasatarangini)

Drugs required :

1. Purified yellow orpiment (some quantity)
2. Mica sheets (a few)
3. Ash gourd juice (some quantity)
4. Cow's curd (some quantity)
5. Jujube leaves (some quantity)

Preparation :

Soak orpiment in 3 and 4, for three days in each. Then wash it. Place the pieces of orpiment between two sheets of mica and seal in a pair earthen discs. Seal the rims with a paste of jujube leaves. Put this capsule

in a sand bath and heat for three hours on moderate fire. Allow to cool. Collect the orpiment between the sheets of mica, which now has a red diamond like lustre.

Action and Uses :

Antibiotic. Indicated in gout, syphilis and lepromatous affections.

Dose :

100 to 200 mg.

19. SAMEERA PANNAGA RASA

(Siddha Prayoga Sangraha)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified red orpiment	1
4. Purified yellow orpiment	1
5. Purified white arsenic	1
6. Aloe juice	sufficient quantity

Preparation :

Grind 1 and 2 into fine black mass. Add the rest one by one and grind into fine powder. Then add aloe juice and grind for 3 days. Dry the product. Subject to heating in a set up on sand bath as for sindooras, for 50 to 60 hours or until the process is complete. Cool and collect contents of capsule. Powder and store.

Action and Uses :

Expectorant and stimulant. Indicated in pneumonia, cough, dyspnoea, pain in joints and in insanity.

20. DHATREE LOHA

(Bhaishajyaratnavali : Sooladhikara)

Drugs required :

	parts
1. Emblic myrobalan powder ..	4
2. Glycyrrhiza powder ..	1
3. Calx of iron ..	2
4. Tinospora stems	sufficient for decoction

Preparation :

Subject 1 to 3 to grinding with the addition of tinospora decoction for 7 days. Dry the product, and compress into 500 mg. tablets.

Action and Uses :

Appetiser, antacid and mildly laxative. Indicated in loss of appetite, colic, hyper acidity, constipation and inflammation in stomach. Also useful in anaemic conditions.

Dose :

1 to 2 tablets with ghee or honey.

21. GOKSHURADI GUGGULU

(Sarangadhara Samhita : Madhyamakhandā)

Drugs required :

		kg.
1. Small caltrops	..	1.40
2. Water	..	8.40
		gms.
3. Purified bdellium	..	350
4. Three pungents total	..	150
5. Three myrobalans total	..	150
6. Nut grass tubers	..	50
7. Three myrobalans	sufficient for decoction	

Preparation :

Prepare decoction of small caltrops in water until reduced to $\frac{1}{2}$. Filter the decoction and add purified bdellium and boil to pasty consistency. Then add the fine powders of 4 to 6 and mix. Grind this paste with the addition of three myrobalans decoction. Bring to consistency and press into 500 mg. tablets.

Action and Uses :

Diuretic and antidiabetic. Indicated in dysurea and diabetes. Also in spermatorrhoea and gout.

Dose :

1 to 2 tablets a day.

22. KANCHANARA GUGGULU

(Sarangadhara Samhita : Madhyamakhande)

Drugs required :

	gms.
1. Purple mountain ebony bark ..	500
2. Three myrobalans (each) ..	100
3. Three pungents (each) ..	50
4. Roots of Crataeva ..	50
5. Cardamoms ..	12.5
6. Cinnamon bark ..	12.5
7. Cinnamon leaves ..	12.5
8. Purified bdellium ..	1037.5

Preparation :

Mix purified bdellium with a decoction of three myrobalans and slowly boil to a syrupy consistency. Then add powders of the other drugs and mix well. Grind to fine pill making consistency and make pills of 500 mg. weight.

Action and Uses :

Reduced painful swellings. Indicated in scrofulous affections of the neck and tumors and ulcers.

Dose :

1 to 2 tablets a day.

— — —

23. KAMADUGHA RASA

(Rasayoga Sagara)

Drugs required :

- | | |
|--------------------------------|--------------------|
| 1. Calx of pearls | |
| 2. Calx of pearl oyster shells | |
| 3. Calx of sacred conch | |
| 4. Calx of cowries | All equal quantity |
| 5. Calx of corals | |
| 6. Red ochre | |
| 7. Tinospora starch | |

Preparation :

Take all drugs in fine powder form. Grind to attain further fineness and homogeneity. Preserve as powder.

Action and Uses :

Antacid and antipyretic. Indicated in hyper acidity, chronic fevers and leucorrhoea.

Dose :

100 to 200 milligrammes. Given with some sugar and cumin seed decoction.

24. LEELA VILASA RASA

(Rasendra Sangraha : Amlapittadhikara)

Drugs required

- | | | |
|---------------------|----|------|
| | | part |
| 1. Purified mercury | .. | 1 |
| 2. Purified sulfur | .. | 1 |
| 3. Calx of copper | .. | 1 |

		gms.
4. Calx of mica	..	1
5. Calx of Iron	..	1
6. Emblic myrobalan	sufficient quantity for juice	
7. Beleric myrobalan	..	
for decoction		
8. Eclipta herb	..	

Preparation :

Grind 1 and 2 till a fine black mass is obtained. Add the calxes and continue grinding. When completely mixed, add juice of emblic myrobalan little by little and continue grinding for three days. Grind with decoction of beleric myrobalans for the next three days. Finally grind with Eclipta juice for a day. Then stop adding any liquid and dry. Granulate and make tablets of 100 mg. weight.

Action and Uses :

Antacid and stimulant. Indicated in hyper acidity, vomiting and burning sensation in the chest.

Dose :

1 to 4 tablets a day.

25. NASHTAPUSHPANTAKA RASA

(Bhaishajya Ratnavali : Yonivyapadadhikara)

Drugs required :

		gms
1. Purified mercury	..	50
2. Purified sulfur	..	50

		gms.
3.	Calx of iron	50
4.	Calx of tin	50
5.	Calx of borax	50
6.	Calx of silver	50
7.	Calx of mica	50
8.	Calx of copper	50
9.	Tinospora juice	quantity sufficient
10.	Three myrobalans decoction	"
11.	Croton root decoction	"
12.	Negundo leaf juice	"
13.	Jacquins night shade juice	"
14.	False calumba decoction	"
15.	Leptadenia decoction	"
16.	Costus root decoction	"
17.	Indian night shade root decoction	"
18.	Black night shade juice	"
19.	Turmeric juice	"
20.	Himalayan silver fir leaf decoction	"
21.	Adhatoda juice	"
22.	Rattan cane decoction	"
23.	Sida root decoction	"
24.	Rock salt	3.125
25.	Glycyrrhiza	3.125
26.	Croton roots	3.125
27.	Cloves	3.125
28.	Bamboo manna	3.125
29.	Lesser galangal	3.125
30.	Small caltrops	3.125
31.	Common sesban juice	quantity sufficient
32.	Sacred basil juice	"

Preparation :

Grind 1 and 2 into fine black sulfide. Add all the calxes to this and grind well. Grind the resultant with

juices and decoctions 9 to 23, for 3 days with each. To the product, add fine powders of 24 to 30, and mix well by grinding. Grind the product with 31 and 32 for 3 days with each. Bring to consistency by continued grinding and make 100 mg. pills.

Action and Uses :

Antirheumatic. Stimulant of the urinogenital system. Indicated in rheumatism, uterine diseases, painful micturition, scanty secretion of semen and pains in the genitalia.

Dose :

1 to 2 pills.

26. PRABHAKARA VATI

(Bhaishajya Ratnavali : Hridrogathikara)

Drugs required :

	part
1. Calx of copper pyrites ..	1
2. Calx of Iron ..	1
3. Calx of mica ..	1
4. Bamboo manna ..	1
5. Bituminous asphalt ..	1
3. Arjun bark ..	quantity for decoction

Preparation :

Grind drugs 1 to 5 adding instalments of arjun bark decoction until a fine mass of pill making consistency is obtained. Press into 500 mg. pills.

Action and Uses :

Antianaemic and stimulant of heart. Indicated in diseases of heart and chest. Useful in coughs.

Dose :

1 to 2 tablets a day.

27. PIPPALYADI LOHA

(Bhaishajyaratnavali : Hicca Swasadhikara)

Drugs required :

		part
1. Long pepper	..	1
2. Ebblic myrobalan	..	1
3. Raisins	..	1
4. Jujube fruits	..	1
5. Embellia fruits	..	1
6. Sugar	..	1
7. Calx of Iron	..	7
8. Costus roots	..	1

Preparation :

Powder all drugs except 7 and sieve. To this sieved powder, add 7 and thoroughly mix. Press into 500 mg. tablets.

Action and Uses :

Haematinic and decongestant of the respiratory tract. Indicated in anaemic states, anasarca, obesity, hiccup, dyspnoea and nausea.

Dose :

1 to 2 tablets with honey.

28. PRAVALA PANCHAMRITA

(Yogaratanakara : Gulma Chikitsa)

Drugs required :

	part
1. Calx of corals ..	2
2. Calx of pearls ..	1
3. Calx of sacred conch ..	1
4. Calx of pearl oyster shells ..	1
5. Latex of calotropis	sufficient quantity

Preparation :

Grind ingredients 1 to 5 with the latex until a mass of cake making consistency is obtained. Make small cakes and dry. Place in earthen capsule, seal and incinerate in kiln. When cooled, collect powder and preserve the contents of capsule.

Action and Uses :

Appetiser, antacid, expectorant and antiasthmatic. Indicated in abdominal bloating, tumors indigestion, loss of appetite, acute and chronic diarrhoea, cough and diseases the heart.

Dose :

200 mg. given with ghee or honey.

29. SRINGARABHARA RASA

(Bhaishajya Ratnavali : Rajayakshmadhikara)

Drugs required :

	gms.
1. Calx of mica ..	100
2. Camphor ..	3.25
3. Mace ..	3.25
4. Black vetiver ..	3.25
5. Large long pepper ..	3.25
6. Cinnamon leaves ..	3.25
7. Cloves ..	3.25
8. Indian spike nard ..	3.25
9. Himalayan silver fir leaves ..	3.25
10. Cinnamon bark ..	3.25
11. Nagkeshar stamens ..	3.25
12. Costus root ..	3.25
13. Fire flame flowers ..	3.25
14. Three myrobalans total ..	4.75
15. Three pungents—total ..	4.75
16. Cardamoms ..	6.25
17. Nutmeg ..	6.25
18. Purified sulfur ..	6.25
19. Purified mercury ..	3.125

Preparation :

Grind 18 and 19 into fine black sulfide. Add fine powders of the rest of the drugs and grind with the addition of distilled water. Dry, granulate and make 100 mg. pills.

Action and Uses :

Antipyretic, antitubercular, antacid, antianaemic and expectorant. Indicated in pyrexia, haemoptysis,

tuberculosis, cough, asthmatic affections, hyperacidity, anaemia and colic.

30. SOMANATHA RASA

(Bhaishajya Ratnavali : Bahumootradhikara)

Drugs required :

		gms.
1.	Calx of iron	12.5
2.	Purified mercury	6.25
3.	Purified sulfur	6.25
4.	Cardamoms	6.25
5.	Cinnamon leaves	6.25
6.	Turmeric	6.25
7.	False calumba stem	6.25
8.	Rose apple seeds or fruits	6.25
9.	Vetiver	6.25
10.	Cumin seeds	6.25
11.	Small caltrops	6.25
12.	False pareira brava	6.25
13.	Emblic myrobalan	6.25
14.	Pomogranate rind	6.25
15.	Calx of borax	6.25
16.	Sandal wood	6.25
17.	Purified bdellium	6.25
18.	Lodh tree bark	6.25
19.	Arjun bark	6.25
20.	Sal tree resin	6.25
21.	Galena	6.25

22. Embelia fruits	.. 6.25
23. Goat's milk	quantity sufficient

Action and Uses :

Grind 1 and 2 into fine black mass. Add the rest in powdered form and mix. Grind with the addition of goat's milk. Dry, granulate and compress into 500 mg. tablets.

Action and Uses :

Antibiotic. Indicated in diabetis insipidus and leucorrhoea, menorrhagia and foetid uterine discharges.

Dose :

1 or 2 tablets.

31. SOOLAHARNA VATI

(Bhaishajya Ratnavali : Soolarogadhikara)

Drugs required :

	part
1. Chebulic myrobalan powder	.. 1
2. Three pungents powder	.. 1
3. Purified nux vomica seeds	.. 1
4. Asafoetida	.. 1
5. Rock salt	.. 1
6. Purified sulfur	.. 1
7. Distilled water	quantity sufficient

Preparation :

Grind drugs 1 to 6 with the addition of 7 until a fine mass is reached. Dry, granulate and press into 300 mg. tablets.

Action and Uses :

Carminative. Indicated in abdominal tumors, colic and loss of appetite.

Dose :

1 tablet with hot water after food.

32. SOOLAVAJRINI RASA

(Bhaishajya Ratnavali : Soolarogadhikara)

Drugs required :

	gms.
1. Purified mercury	25
2. Purified sulfur	25
3. Calx of iron	25
4. Calx of Borax	12.5
5. Asafoetida	12.5
6. Dry ginger	12.5
7. Three pungents	12.5
8. Three myrobalans	12.5
9. Camphor zedoary	12.5
10. Cinnamon bark	12.5
11. Cinnamon leaves	12.5
12. Cardamoms	12.5
13. Nutmeg	12.5
14. Cloves	12.5
15. Henbane seeds	12.5
16. Cumin seeds	12.5
17. Coriander seeds	12.5
18. Himalayan silver fir leaves	12.5
19. Goat's milk	quantity sufficient

Preparation :

Grind 1 and 2 into black mass. Add powders of 15-ingredients up to 18 and grind with goat's milk until pill rolling consistency is reached and the mass is very fine without fibres or grit. Roll into 400 mg. pills.

Action and Uses :

Carminative, antacid and antianaemic. Indicated in colic, hyperacidity, enlargement of liver and spleen, abdominal bloating and tastelessness.

Dose :

1 pill.

33. SIDDHA PRANESWARA RASA

(Rasendra Sara Sangraha : Jwara Chikitsa)

Drugs required :

	grs
1. Purified mercury ..	40
2. Purified sulfur ..	40
3. Calx of mica ..	40
4. Calx of Borax ..	10
5. Carbonate of soda ..	10
6. Carbonate of potash ..	10
7. Five salts ..	10
8. Three myrobalans (each) ..	10
9. Three pungents (each) ..	10
10. Tellicherry seeds ..	10

		gms.
11. Cumin seeds	..	10
12. Nigella seeds	..	10
13. Henbane seeds	..	10
14. Asafoetida	..	10
15. Embelia fruits	..	10
16. Dill seeds	..	10
17. Lead wort root	..	10

Preparation :

Prepare black sulfide by finely grinding 1 and 2. Add the remaining drugs in powdered form and continue grinding. Press into 500 mg. tablets.

Action and Uses :

Antipyretic and antidysenteric. Indicated in fevers, acute and chronic diarrhoea and colic.

Dose :

1 Tablet.

34. SILAJATWADI LOHA

(Rasendrasara Sangraha : Yakshma Chikitsa)

Drugs required :

		part
1. Purified bituminous asphalt	..	1
2. Powder of three pungents—total	..	3
3. Calx of copper pyrites	..	1
4. Calx of iron	..	1
5. Liquorice root	..	1

Preparation .

Powder the drugs, mix the calxes with it and granulate and compress into 500 mg. tablets.

Action and Uses :

Expectorant, antianaemic and antitubercular. Indicated in tuberculosis and anaemia.

Dose :

1 tablet.

35. SMRITISAGARA RASA

(Yogarajnakara : Apasmara Chikitsa)

Drugs required :

	part
1. Purified mercury	1
2. Purified sulfur	1
3. Purified yellow orpiment	1
4. Purified red orpiment	1
5. Calx of copper	1
6. Indian pennywort	quantity for juice
7. Powder of sweet flag	quantity for decoction
8. Oil of staff tree seeds	sufficient quantity

Preparation :

Grind drugs 1 to 5, adding juice of Indian pennywort in small doses for 21 days. Similarly grind with sweet flag decoction for 21 days. Finally grind with the oil until the traces of water in the mass is lost and a solid product is obtained. Store as such or as 100 mg. pills.

Action and Uses :

Stimulant of the nerve centres. Indicated in epilepsy.

Dose :

100 to 200 mg. with honey.

36. SAPTAMRUTA LOHA

(Bhaishajya Ratnavali : Netrarogadhikara)

Drugs required :

	part
1. Glycyrrhiza ..	1
2. Three myrobalans—Total ..	3
3. Calx of iron ..	1

Preparation :

Mix fine powders of 1 and 2 to 3 and grind till thoroughly mixed. Then press into 500 mg. tablets.

Action and Uses :

Antacid, antianaemic, antidiabetic and mildly laxative. Indicated in hyper acidity, colic, diabetes and cataracts.

Dose :

One tablet a day. Given with ghee and honey.

37. SATAVARI MANDOORA

(From Chikitsa prateepa—By B. V. Gokhale)

Drugs required :

	parts
1. Powder of Asparagus roots ..	4
2. Water ..	32
3. Calc of cross iron ..	4
4. Cow's milk ..	12
5. Cow's curd ..	8
6. Cow's ghee ..	1

Preparation :

Boil 1 and 2 until the water is reduced to $\frac{1}{4}$ of volume. To this, add the rest of the drugs and continue heating on moderate fire with continuous stirring, until anhydrous. Powder the resultant product and store.

Action and Uses :

Diuretic. Indicated in colic and dysmenorrhoea.

Dose :

$\frac{1}{2}$ to 1 gm.

38. TAPYADI LOHA

(Siddha Prayoga Sangraha)

Drugs required :

	gms.
1. Three myrobalans powder—Total ..	90
2. Three pungents powder—Total ..	90
3. Lead wort root ..	30

4. Enibelia fruit	..	30
5. Nut grass tuber	..	20
6. Long pepper root	..	12
7. Himalayan cedar wood	..	12
8. False calumba stem	..	12
9. Cinnamon bark	..	12
10. Black pepper root	..	12
11. Purified bituminous asphalt	..	125
12. Calx of copper pyrites	..	125
13. Calx of silver	..	125
14. Calx of iron	..	125
15. Calx of dross iron	..	250
16. Sugar	..	400

Preparation :

Convert all plant drugs and minerals into powder. Mix with calxes and sugar, and grind into fine powder and compress into tablets of 500 mg. weight.

Action and Uses :

Antianaemic and vitalizer. Indicated in anaemia, anasarca, debility, heart diseases, enlargement of liver and spleen and in menstrual disorders.

Dose :

1 to 2 tablets with honey.

39. THRYODASANGA GUGGULU

(Bhaishajya Ratnavali : Vatarogadhikara)

Drugs required :

	part
1. Gum arabic bark ..	1
2. Withania roots ..	1
3. Indian globe flower ..	1
4. Asparagus roots ..	1
5. Elephant creeper stem ..	1
6. Dill seeds ..	1
7. Lesser galangal ..	1
8. Small caltrops ..	1
9. Camphor zedoary ..	1
10. Tinospora stems ..	1
11. Henbane seeds ..	1
12. Dry ginger ..	1
13. Purified bdellium ..	12
14. Three myrobalans	quantity for decoction

Preparation :

Comminute drugs 1 to 12 and grind with 13 in a mortar, with the addition of 14 in instalments until a fine, homogenous mass of tablet making consistency is reached. Make 500 mg. tablets.

Action and Uses :

Antirheumatic. Indicated in lumbago, sciatica, rheumatic pains and arthritis.

Dose :

1 to 2 tablets a day.

40. THIRIBHUVANA KIRTI RASA

(Yogarajnakara : Jwara Chikitsa).

Drugs required :

		part.
1. Purified cinnabar	..	1
2. Purified aconite	..	1
3. Dry ginger	..	1
4. Long pepper	..	1
5. Purified borax	..	1
6. Long pepper roots	..	1
7. Black pepper	..	1
8. Sacred basil juice	quantity sufficient	
9. Ginger juice	„	
10. Datura leaf juice	„	

Preparation :

Grind drugs 1 to 7 with each of the juices for three days and press into 100 mg. tablets.

Action and Uses :

Antipyretic. Indicated in pyrexia and intermittent fevers.

Dose :

1 to 2 tablets with honey or ginger juice.

GLOSSARY

1. ACONITE :

Sanskrit	:	Visha, Nabhi, Vishanabhi.
Tamil	:	Vasanaavi.
Malayalam	:	Vatsanabhi.
Telugu	:	Vatsanabhi.
Kannada	:	Vatsanabhi.
Hindi	:	Bachnag, Bish.

The drug is chiefly derived from *Aconitum napellus* Linn. and *Aconitum ferox* Wall. of the Ranunculaceae. Aconite roots in commerce occur as dark brown roots of 2.5 to 5 cm. length and upto 2 cm. thickness. They are wrinkled more in the longitudinal direction. Fracture is horny and taste is bitter. Though the drug is poisonous and has a depressant action on the heart and associated organs, after mitigation or purification, it has marked stimulant action on these organs as shown by experiments. Cow's milk gives better purification results than cow's urine. The drug contains alkaloids, aconitine, neopelline and pseudoaconitine. Drug collected from altitudes higher than 600 metres is less potent. The drug is collected from the alpine Himalayan regions.

2. ADAMANT CREEPER :

Sanskrit	:	Astisamhara.
Tamil	:	Pirandai.
Telugu	:	Nalleru.

Malayalam : Piranda.
 Kannada : Mangarvalli.
 Hindi : Nallar.

Also called as the square stalked vine, because the stem is tetragonous in cross section. Botanically it is *Cissus quadrangularis* Linn. of the family Vitaceae. It is useful in digestive disorders, scurvy and asthmatic affections. The plant contains calcium oxalate, carotene and antiscorbutic acid (Vitamin 'C')

3. ADHATODA :

Sanskrit : Vasa, Vasaka.
 Tamil : Aadatodai.
 Telugu : Addasaramu.
 Malayalam : Aadalotakam.
 Kannada : Aadusoge.
 Hindi : Arusa.

Also called as the malabar nut plant. It is *Adhatoda vasica* Nees. of the family Acanthaceae. Used as expectorant and antispasmodic. Therapeutic properties attributed to alkaloid vascine and the essential oil.

4. ADIANTUM :

Sanskrit : Hamsapadi.
 Tamil : Seruppadaï ?
 Telugu : Hansapadamu.
 Malayalam : Cheru Pulladi.
 Hindi : Hansraj.

Also called as the maiden hair fern. *Adiantum lunulatum* Burm. and *Adiantum venustum* G. Don. occur in cooler hill forests. Antipyretic and diuretic properties are attributed.

5. AERVA LANATA JUSS.

Sanskrit	: Pashanabheda.
Tamil	: Sirupeelai.
Telugu	: Condapindi.
Malayalam	: Cherupula.
Kannada	: Bili hindi soppu.
Hindi	: Gorakhganj, Gorakhbooti.

Aerva lanata Juss. belongs to the family *Amarantaceae*. The plant occurs all over Indian plains. The roots are preferred for use. It is diuretic and esteemed as a lithontriptic.

6. AGATI :

Sanskrit	: Agastya.
Tamil	: Agatti.
Telugu	: Avisi.
Kannada	: Agashi
Malayalam	: Agatti.
Hindi	: Agastiya.

This is *Agati grandiflora* Desv. of the *Leguminosae*. The plant is astringent, tonic and cooling. The leaves and flowers are nutritive.

7. AJOWAN :

Sanskrit	: Ajamoda.
Tamil	: Omam.
Telugu	: Omamu.
Malayalam	: Oma.
Kannada	: Oma.
Hindi	: Ajowan, Ajwain.

Variousy referred to as the fruits or seeds of ajowain or ajowan. Botanically it consists of the fruits of **Trachyspermum ammi** Sprague. of the family Umbelliferae. The drug is used in diarrhoea, indigestion and cholera. It is carminative, stimulant and antispasmodic. Contains essential oil with thymol.

8. ALANGIUM :

Sanskrit	: Ankola.
Tamil	: Azhinjil.
Telugu	: Udugu chettu.
Malayalam	: Ankolam.
Kannada	: Ankola mara.
Hindi	: Akola, Dhera.

The plant is also known as the sage leaved alangium. It is botanically, **Alangium salvifolium** Wang. of the Alangiaceae. The fruits with seeds and the roots are most often used in medicine. The drug is purgative and anthelmintic. Useful also in skin diseases and rheumatic pains. Root and seed contain a number of alkaloids. alangine, lamarckine, akoline, akharkantine, alanginine and alpha and beta alangium.

9. ALBIZZIA FLOWERS :

Sanskrit	: Sirishapushpa.
Tamil	: Vagaippoo.
Telugu	: Diriana.
Malayalam	: Vaka.
Kannada	: Baagaehoovu.
Hindi	: Sirispushpa.

Consists of the flowers of **Albizzia lebbeck** Benth. of the Leguminosae. The tree is also known as the lebbeck or siris tree. The drug is astringent, tonic and restorative. Saponin, gum and tannin are present in the plant.

10. ALEPPO GALLS :

Please see 'Oak galls'.

11. ALKANET :

Sanskrit	: Dineshvalli.
Tamil	: Raththapaalai.
Hindi	: Ratanjoth

The source plant is tentatively referred to **Alkanna tinctoria** of the Boraginaceae. It is very likely that other Boraginaceae members are also used. Any way, the drug always give a red dye. The drug is applied to swellings, rheumatic affections and eruptions.

12. ALLIGATOR YAM :

Sanskrit	: Ksheeravidari.
Tamil	: Paalmudukkankizhangu.
Telugu	: Palagummadu.
Malayalam	: Palmudukku.
Hindi	: Bilaikand.

This consists of the tuberous roots of **Ipomoea digitata** Linn. of the Convolvulaceae. It is synonymous with **Ipomoea paniculata** R.Br. The drug is tonic, lactagogue and aphrodisiac.

13. ALMONDS :

Sanskrit	: Badam.
Tamil	: Vaadumai.
Telugu	: Badam.
Malayalam	: Vaaduma.
Kannada	: Baadamu.
Hindi	: Baadam.

The kernels of *Pranus amygdalus* Batsch. of the Rosa-ceae are used. There are two varieties, bitter (amara) and sweet (dulcis). The bitter variety is poisonous because of its hydrocyanic acid content. Sweet almonds are demulcent and highly nutritive. Useful as a non-starchy diet for diabetics. The bitter almonds that have a characteristic odor and taste are sedative and should not be used unless specifically mentioned.

14. ALOE PLANT :

Sanskrit	: Kumari.
Tamil	: Kattrazhai.
Telugu	: Kalabanda.
Malayalam	: Katravaza.
Kannada	: Kathalaigida.
Hindi	: Gheekumvar.

This is *Aloe darbadensis* Mill. of the Liliaceae. Its juice is highly cooling and useful in fevers. When dried, it becomes the aloe of commerce, which occurs as black masses. For properties, please see 'Aloes'.

15. ALOES:

Sanskrit	: Kanyasara.
Tamil	: Moosambaram.

Malayalam :	Sanninayakam.
Telugu :	Moosambaram.
Kannada :	Moosambara.
Hindi :	Elva.

Consists of the dehydrated pulp of the aloes, *Aloe barbadense* Mill. of the Liliaceae. When quite dry it is brittle. Odor characteristic. Varieties are distinguished by microscopy. It is a powerful purgative, but slow in action. In small doses it is useful in constipation. In heavy doses, it is an emmenagogue and abortifacient. Contains the aloins which are the active principles.

16. AMARANTUS SPINOSUS :

Sanskrit :	Tanduliya.
Tamil :	Mullukkeerai.
Telugu :	Mundiathotakura.
Malayalam :	Mullankeerai.
Kannada :	Mullutantu.
Hindi :	Katemat.

A common amarantaceous weed, of the waste lands on the Indian plains. Used as emollient, lactagogue and mild laxative and also as diuretic. Useful in menorrhagia, gonorrhoea, eczema and colic.

17. AMARANTUS VIRIDIS :

Sanskrit :	Tanduliya, marisha.
Tamil :	Kuppaikkeerai.
Telugu :	Chilakattotakura.
Malayalam :	Mullanchira.
Kannada :	Kanta-nate
Hindi :	Kataili-chowlayee.

Plant is emollient. Occurs throughout India, along with the weeds.

18. AMBER OR AMBERGRIS :

Sanskrit : Amber.
Tamil : Meenamber.
Malayalam : Meenamber.
Telugu,
Kannada
and Hindi : Ambar.

This is a substance formed in the intestines of the whale, *Physeter catodeon* (Syn: *Physeter macrocephalus*.) and found there or floating in the sea. It occurs in masses varying in size from 1 to 20 or more pounds, greyish in color, veined, brittle, with an agreeable, persistent odor recalling musk. It contains 25% amberin which appears to be a derivative of cholesterol. The horny beaks of cuttle fish, upon which the sperm whale feeds, are often found in ambergris and are considered to be an indication of genuineness.

19. AMOORA BARK :

Sanskrit : Rohitaka twak.
Tamil : Rohitakappattai.
Malayalam : Chemmara.
Telugu : Chanamanu.
Kannada : Mulunathalu.
Hindi : Roheda.

This consists of the bark of *Amoora rohitaka* W & A. of the Meliaceae. It is astringent. Useful in correcting the functions of glands relating to the alimentary tract.

20. ANTLERS OF DEER :

Sanskrit	: Sringa.
Tamil	: Maankombu.
Telugu	: Duppikommu.
Malayalam	: Maankombu.
Kannada	: Sarangasringa.
Hindi	: Haren ka seeng.

This consists of the horns of various species of deer. As a paste or calx, given internally or applied externally in pains in chest. Calx useful in leucorrhoea and diseases of the respiratory tract. Rich in calcium. Contains some phosphorus also.

21. APPLE SNAIL OPERCULUM :

Sanskrit	: Nakha.
Tamil	: Nagam.
Telugu	: Nakamu chippa.
Malayalam	: Nakha.
Kannada	: Nakha.
Hindi	: Nakha.

This consists of the operculum of a snail. In the literature, it has been referred to **Helix aspera** (or **Achatina fulcea**.) and it is said that it is imported. Often, the opercula of the Indian apple snail (**Pila globosa**) are sold in the market. The drug is classified as an aromatic agent in the ayurvedic materia medica.

22. ARECA NUT — RAW :

Sanskrit	: Poogaphala.
Tamil	: Kottaippakku.
Telugu	: Vakka.

Malayalam : Adakka.
 Kannada : Adike.
 Hindi : Supari.

This consists of the seeds of arecanut palm, *Areca catechu* Linn. of the Palmaceae. The drug is also called as the betle nut or betel nut. It is astringent, aphrodisiac, anthelmintic, nervine tonic, emmenagogue, vermifuge and taenifuge. It is useful in urinary disorders. Contains choline, isoguvocine, and alkaloids, arecaine, arecaidine, arecoline, and guvacine. Arecoline exerts nicotine like action on rabbits.

23. ARJUNA MYROBALAN :

Sanskrit : Arjunaphala.
 Tamil : Venmarudamkai.
 Telugu : Maddi chettu phala.
 Malayalam : Neermarulin pazam.
 Kannada : Toremathi phala.
 Hindi : Koh ka phal.

This consists of the fruits of *Terminalia arjuna* W & A. of the Combretaceae. The drug is tonic and deobstruent. Contains tannin.

24. ARJUN BARK :

Sanskrit : Arjunatwak.
 Tamil : Venmarudampattai.
 Telugu : Tellamaddi.
 Malayalam : Neermarudin pattai.
 Kannada : Torenathi.
 Hindi : Koh ka chal.

This consists of the bark of **Terminalia arjuna** W & A. of the Combretaceae. The drug is astringent and cardiac tonic. It contains arjunine, arjunetin, essential oil, tannin and also reducing sugars and dyes.

25 **ARROW ROOT :**

Sanskrit	: Tavaksheera.
Tamil	: Aroroottu.
Telugu	: Akroot Pindi.
Malayalam	: Koova.
Kannada	: Tavaksheera.
Hindi	: Tabasheer.

This consists of the starch from **Maranta arundinacea** Linn. of the Marantaceae. It is used as a substitute for bamboo manna. Please see bamboo manna.

26 **ARSENIC PENTA SULFIDE :**

Sanskrit	: Gowripashana.
Tamil	: Gowripashana.
Telugu	: Gowripashana.
Malayalam	: Gowripashana.
Kannada	: Gowripashana.
Hindi	: Gowripashana.

This occurs in commerce as orange red stony lumps. Poison.

27. **ARSENIC REALGER :**

Sanskrit	: Manashila.
Tamil	: Manosilai.
Telugu	: Manisila.

Malayalam : Manayola.
 Kannada : Mannasila.
 Hindi : Lal nartai.

Also called as the red orpiment. It is arsenic disulfide. It is used as alterative, febrifuge, tonic, antiperiodic and antibiotic. Used in treatment of fevers, cough, asthma, skin disease and leucoderma. Arsenic realgar is prepared by fusing arsenious acid 5 parts and sulfur 3 parts.

28. ASAFOETIDA :

Sanskrit : Hingu.
 Tamil : Perunkayam.
 Telugu : Inguva.
 Malayalam : Kaayam.
 Kannada : Perungaya.
 Hindi : Hing.

Consists of the dry resinous exudate of **Ferula foetida** Regel. of the family Umbelliferae. The drug is carminative, stimulant, and intestinal antiseptic. It contains essential oil, ferulic acid, umbelliferone, resinous matter and organic sulfur compound. It is used as an abortifacient and as an emmenagogue in substantial doses.

29. ASBESTOS :

Tamil : Kalnar.
 Telugu : Rathinara.

Consists of the asbestos as it is mined. It is a fibrous mineral substance.

30. ASH GOURD :

Sanskrit	: Kooshmanda.
Tamil	: Ven poosini.
Telugu	: Budida gummadi.
Malayalam	: Kumbalam.
Kannada	: Budikumbalakai.
Hindi	: Petha.

Ash gourd is the fruit of **Benincasa hispida** Cogn. of the Cucurbitaceae. It is also called as the white pumpkin.

It is laxative, diuretic, tonic, aphrodisiac, antiperiodic and specific for haemoptysis and haemorrhages from internal organs. It is useful also in insanity, epilepsy, and nervous diseases. Apart from its rich content of salts it contain also vitamin B.

31. ASHOKA BARK :

Sanskrit	: Ashok twak.
Tamil	: Asokappattai.
Telugu	: Asoka.
Malayalam	: Asokam pattai.
Kannada	: Asoka.
Hindi	: Asok ki chal.

This consists of the mature bark of **Saraca indica** Linn. of the Leguminosae. The bark is often adulterated with the bark of **Polyalthia** species. The drug is astringent, useful in uterine affections and menorrhagia. It contains tannins and catechol.

32. **ASPARAGUS ROOT :**

Sanskrit	: Satavari moola.
Tamil	: Thanneervittan kizhangu.
Telugu	: Pillipeechara gaddalu.
Malayalam	: Satavari kizangu.
Kannada	: Halavumakkalathayiberu.
Hindi	: Satavar.

The drug consists of the common wild asparagus, available throughout Indian plains. It is **Asparagus racemosus** Willd. of the Liliaceae. The fresh roots occur in fascicles of long slender cream colored roots of fusiform shape, which may be upto 75 cm. long, and 1.5 cm. thick. On drying the drug becomes thin and brittle. It is used as refrigerent, demulcent, diuretic, aphrodisiac, antispasmodic, alterative, antidiarrhoeal, antidysenteric, galactagogue and veterinary demulcent.

33. **ASPHALT — WHITE :**

Sanskrit	: Silajat.
Tamil	: Karpoorasilajatu.
Telugu	: Jarpoorasilajit.
Kannada	: Karpoorasilajit.
Malayalam	: Karpoorasilajit.
Hindi	: Godanti Hartal.

This occurs in commerce as white, thick flakey masses. It is used in the preparation of calx of white asphalt. Commonly called Gypsum.

34. **ASTERACANTHA LONGIFOLIA :**

Sanskrit	: Kokilaksha, Ikshura.
Tamil	: Neernulli.
Telugu	: Neerugobbi.
Malayalam	: Vayalchulli.
Kannada	: Neerugobbigida.
Hindi	: Talmakhana.

This is a semiaquatic weed in the Indian plains. Commonly found near the rice fields. **Asteracantha longifolia** Nees. belongs to the family Acanthaceae. The plant possesses six thorns at each 'node'. It is diuretic and cooling. Used in dropsy, rheumatism, jaundice, and diseases of the urinogenital system. The seeds are given in gonorrhoea, spermatorrhoea and debility. It contains phytosterol, an alkaloid, potassium, mucilage and essential oil.

35. **ATEES or ATIS :**

Sanskrit	: Ativisha.
Tamil	: Athividayam.
Telugu	: Ativisha.
Malayalam	: Athividayam.
Kannada	: Ativisha.
Hindi	: Atees.

This is the Indian atees root, derived from **Aconitum heterophyllum** Wall. of the Ranunculaceae. It is anti-periodic, aphrodisiac and decongestent of the respiratory tract. It contains amorphous nontoxic alkaloid atisine, dihydroatisine, heteratisin and hetisine. The plant is available in the Himalayas.

36. **BAEL :**

Sanskrit	: Bilwa.
Tamil	: Vilvam.
Telugu	: Bilvam.
Malayalam	: Koovilam.
Kannada	: Belwa.
Hnidi	: Bael.

This is *Aegle marmelos* Corr. of the Rutaceae. All parts of the tree are medicinal. The root is used in intermittent fevers. Unripe fruit is astringent, digestive, stomachic and antidiarrhoeal. Pulp of the ripe fruit is cooling, aromatic and laxative. Fruit contains marmelosin which is identical with imperatorin. Bark contains coumarin, alkaloid and umbelliferone and also aegele-nine. Leaves contain essential oil with alpha and beta phellandrene.

37. **BALA ROOTS :**

Sanskrit	: Bala moola.
Tamil	: Kurunthottiver.
Malayalam	: Chittamuttiver.
Telugu	: Chirubenda moolamu.
Kannada	: Bala.
Hindi	: Bariar.

This consists of the roots of various species of *Sida*. The commonest species encountered on the Indian plains are *S. cordifolia* Linn. *S. rhombifolia* Linn., *S. acuta* Burm., and *S. veronicaefolia* Lam. The drug is astringent, tonic, aphrodisiac, demulcent and febrifuge. Indicated in rheumatism, pulmonary tuberculosis, facial paralysis, sciatica, leucorrhoea, spermatorrhoea, gonorrhoea and scalding urine.

38. BALOON VINE :

Sanskrit	: Indravalli, Karnasphota.
Tamil	: Mudakkaruttan.
Telugu	: Buddakakara.
Malayalam	: Uzinya.
Kannada	: Minsuballi.
Hinli	: Kanphuti.

This is *Cardiospermum halicacabum* Linn. of the family Sapindaceae. The fruits are inflated. Much esteemed in the treatment of rheumatic affections. Plant contains saponin.

39. BALSAM COPAIBA :

This is a resinous matter derived from the plant, *Copaifera lansdorffii* of the family Leguminosae. Occurs in commerce as brownish yellow masses with green fluorescence. Taste is unpleasant, acrid and bitter.

Gurjun balsam is an adulterant of this drug. It is obtained from *Dipterocarpus turbinatus* Gaertn. of the Dipterocarpaceae. The adulterant gives a purple or red color in a mixture of 5 ml. acetic and four drops of nitric acid.

Balsam copaiba does not contain cinnamic or benzoic acid. It consists of a volatile oil, resin acids, and a small quantity of bitter principle. It is a genitourinary disinfectant. It has diuretic, stimulant, expectorant and laxative properties.

40. BAMBOO MANNA :

Sanskrit	: Vanisalochana
Tamil	: Moongiluppu.

Telugu : Thavaksheeri (Veduruppu).

Malayalam : Mulakkarpooram.

Hindi : Thabaseer.

This is the silicious concretion contained in the inter-nodal hollows of the bamboo plants. The bamboo is usually *Bambusa arundinacea* Druce. Apart from its high siliceous content, it contains some quantities of iron, potash, calcium, and alumina. It is also known as 'Tabashir'. It is claimed to be stimulant, astringent, tonic, aphrodisiac and refrigerent. It resembles silica gel in porosity and hygroscopicity. When quite dry, it is ahy white or slightly blueish white in color. It occurs in small pieces with the fractured ends angular. Commercial silica gel is also sold in the market as Bamboo manna, but it is readily distinguished from the natural product by its pure white brilliancy and irregular lumpiness. It has a characteristic fragrance of some essential oil, which is practically absent in the natural stuff. As the natural material is frequently gathered from the burnt bamboos, there may be darker pieces also.

41. BANANA :

Sanskrit : Kadali.

Tamil : Vaazhai.

Telugu : Arati.

Malayalam : Vaazha.

Kannada : Baale.

Hindi : Kela.

This is *Musa paradisiaca* Linn. of the Musaceae. Sometimes called as plantain. (Please see Plantain also).

42. **BANYAN TREE :**

Sanskrit	: Vata.
Tamil	: Aalamaram.
Telugu	: Marri chettu.
Malayalam	: Peral.
Kannada	: Aala.
Hindi	: Bad.

This is **Ficus bengalensis** Linn. of the family **Moraceae**. It is a common tree in the hotter plains of the world. The root bark and latex are frequently employed in medicine. Tonic and astringent properties are attributed. Used in dysentery, diarrhoea, diabetes, rheumatism and lumbago. Also in gonorrhoea.

43. **BARLEY :**

Sanskrit	: Yava.
Tamil	: Yavai arisi, Barli arisi.
Telugu	: Yavadhanya.
Kannada	: Yavam.
Hindi	: Jow.

This consists of the grains of **Hordeum vulgare** Linn. of Graminae. The drug is demulcent. Reputed as food in atonic dyspepsia. Easily digested. Traces of 'As' present in plant.

44. **BASTARD TEAK :**

Please see Bengal kino'.

45. BDELLIUM :

Sanskrit	: Guggul.
Tamil	: Guggulu, Erumaikan-kungilam.
Telugu	: Mahisakshi Gugula.
Kannada	: Guggulu.
Malayalam	: Guggulu.
Hindi	: Gugal.

This is the gum resin obtained from **Commiphora mukul** Engl. of the Burseraceae. Also called as the Indian Bdellium. It occurs in commerce as dark reddish brown, somewhat sticky masses. When quite dry, the fractured surface is hard. The odor is that of cedar wood. Taste acrid with little bitterness. Used as an emmenagogue, astringent, antiseptic, expectorant, demulcent and antiperiodic. It contains essential oil upto 1.45%.

46. BEES WAX :

Sanskrit	: Madhuchishta.
Tamil	: Thenemezhugu.
Telugu	: Tena Mainam.
Malayalam	: Mezhugu.
Kannada	: Mena.
Hindi	: Mom.

This consists of the wax from the honey comb. After centrifuging the honey, the comb is gently heated to melt and filtered. It is purified by re-melting and stirring with water. The product is yellow. This is used in medicine. Some times, for bleaching it it is scraped into ribbons and exposed to sunlight. Bees wax is a preservative, and

prevents decay. Its melting point is between 62 and 64 degrees Centigrade. The specific gravity ranges from 0.956 and 0.970. Its refractive index at 80 degrees Centigrade is 1.4380 to 1.4420. These serve as indicators of purity as the limits are quite narrow. Bees wax contains 80% of melissyl palmitate with free cerotic acid to about 15% and small quantities of an aromatic body, cereolin and probably melissyl stearate.

47. BEETLE KILLER ROOT :

Sanskrit	: Bharngi.
Tamil	: Kandoobarangi.
Malayalam	: Chiruthekku.
Telugu	: Gantu-Bharangi.
Kannada	: Kirudegu.
Hindi	: Bharangi.

This consists of the roots of **Clerodendrum serratum** Moon. of the family Verbenaceae. The roots are knotty. The drug contains alkaloid. Used in febrile and catarrhal affections. Also useful in malarial fevers.

48. BELERIC MYROBALAN :

Sanskrit	: Vibhitaki.
Tamil	: Thanrikkai.
Telugu	: Tanikaya.
Malayalam	: Thaanni.
Kannada	: Tanraekayi.
Hindi	: Baheda.

This consists of the fruits of **Terminalia belerica** Roxb. of the family Combretaceae. The fruit flesh or rind is used, discarding the seeds. The drug is tonic, astringent and styptic. Useful in dyspepsia. Contains tannins.

49. BENGAL GRAM :

Sanskrit	: Chanaka.
Tamil	: Mookkukkadalai.
Telugu	: Senagalu.
Malayalam	: Kadala.
Kannada	: Kadalae.
Hindi	: Chana.

Also called as the chick pea. Consists of the seeds of **Cicer arietinum** Linn. of the Leguminosae. Acid exudation of moistened seeds is astringent and is used in dyspepsia and constipation. Contains oxalic and malic acids and a number of amino acids with vitamins A, D and E.

50. BENGAL KINO :

Sanskrit	: Palasha.
Tamil	: Palasam, Purasu.
Telugu	: Moduga.
Malayalam	: Palasa, Murukkan.
Kannada	: Muttuga.
Hindi	: Palas.

Also called as the butea gum tree, flame of the forest and bastard teak. This is **Butea monosperma** Kuntze. of the Leguminosae. The bark, seeds, gum and flowers are medicinal. The flat diskoid seeds are anthelmintic. Bark and gum are astringent. Seeds contain proteolytic and lipolytic enzymes. Also a gulcoside butrin and heterosides are present.

51. **BERBERIS :**

Sanskrit	: Darunisha, daruharidra, Darvi.
Tamil	: Maramanjai.
Telugu	: Mrani pasapu.
Malayalam	: Maramanjai.
Kannada	: Maranarsina.
Hindi	: Daruhaldi.

The drug consists of the bark and wood of **Berberis aristata** DC. of the Berberidaceae. Also called as the tree turmeric. Useful in fevers, oriental sores, bleeding piles and ulcers. A dry extract is sold in the Indian market as 'Rasout'. The drug contains berberis alkaloids. In south India, the stems of **Coscinium fenestratum** Colebr. of the Menispermaceae are used which are held to be better than Berberis. Please see 'False calumba stem' also.

52. **BERMUDA GRASS :**

Sanskrit	: Dhoorva.
Tamil	: Arugampull.
Telugu	: Gerika.
Malayalam	: Karukapul.
Kannada	: Garikae.
Hindi	: Dub.

This is **Cynodon dactylon** Pers. of the Graminae. It is variously called as the lawn grass and couch grass. The fresh grass is used in medicine. It is diuretic and astringent. Useful in dropsy, anasarca, hysteria, epilepsy, insanity, chronic diarrhoea, dysentery, catarrh and ophthalmia. An oil prepared from this is used in skin diseases.

53. BETLE LEAVES :

Sanskrit	: Naagavalli patra :
Tamil	: Vetrilai.
Telugu	: Tamalapaku.
Malayalam	: Vettilai.
Kannada	: Veeliyadele, Betle.
Hindi	: Paan.

Consists of the fresh leaves of **Piper betle** Linn. of the Piperaceae. Aromatic, carminative, stimulant and expectorant. Contains essential oil, chavicol and enzymes. It is an antiseptic of the respiratory tract.

54. BEZOAR :

Sanskrit	: Gorochana.
Tamil	: Gorochanam.
Telugu	: Gorochanam.
Malayalam	: Gorochanam.
Kannada	: Gorochanam.
Hindi	: Gorochan.

Also known as the ox gall. It rarely occurs as single or compound concretions in the gall bladder or the bile ducts in the cow. The shape and size are very variable. It is usually yellow when fresh. It becomes darker on exposure. It is brittle, concentrically laminated, bitter and characteristically aromatic. It is prescribed in miscarriage. The drug is laxative, antispasmodic, cholagogue and cooling. Used in cholera, convulsions and hysteria in small doses. The market samples may frequently be adulterated with starch colored with turmeric and mixed with fresh bile to give the odor and taste. Grit, saw dust, hairs and dehydrated bile are often found as admixture.

55. BIDALAVANA :

Please see 'Vit salt'.

56. BILE OF ROHITAK FISH :

Sanskrit	: Rohita pitta.
Tamil	: Rogita meen pittam,
Telugu	: Royya peetha.
Kannada	: Rohitamatsya pitta.
Malayalam	: Chenkavarimeen pittam.
Hindi	: Rohit machlika pitta.

Consists of the gall bladder and contents of it, collected from a fish — **Labeo rohita**. The drug is laxative, and useful in bilious intermittant fevers.

57. BITTER GOURD :

Sanskrit	: Karavella.
Tamil	: Paakal.
Telugu	: Kakara.
Malayalam	: Kaippakkai.
Kannada	: Karela.

Bitter gourd is **Momordica charantia** Linn. of the family Cucurbitaceae. Leaves are emetic, purgative, antibiotic and anthelmintic. Useful in jaundice, leprosy, bilious affections, burning soles and ascariasis. Contains essential oil, carotene, glucoside, saponin and alkaloid momordicine. Used in diabetes and shown to be hypoglycaemic in rabbits.

58. BITTER HAIR FLOWER :

Sanskrit	: Patola.
Tamil	: Peyppudal.
Telugu	: Chedupotla.
Kannada	: Kahi-Padaval.
Malayalam	: Kaippan-Patavalan.
Hindi	: Kadve-Padaval.

Please see 'Wild snake gourd'.

59. BITUMINOUS MOMIA :

Sanskrit and other languages	: Gomottra-silajat.
Hindi	: Momomai.

This is supposed to be ejected from the Himalayan rocks in hot seasons. It is a black lumpy substance emitting an ammoniacal odor simulating cow's urine. It is rich in iron. According to Charaka, all diseases are curable by the use of this drug. It is tonic, mildly laxative, respiratory stimulant, disinfectant, expectorant, diuretic and lithontriptic. It contains vegetable matter, hippuric acid, benzoic acid, potash, alumina e'c. Also called bituminous asphalt or black asphalt.

60. BLACK ASPHALT :

Sanskrit	: Gomootra silajat.
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Please see 'Bituminous momia'.

61. BLACK CARAWAY SEEDS :

Sanskrit	: Krishnajeeraka.
Tamil	: Karuncheerakam.
Telugu	: Nallajeelakarra.

Malayalam : Karinjeerakam.

Kannada : Karijiraka.

Hindi : Kalazeera.

This consists of the black angular seeds of *Nigella sativa* Linn. of the Ranunculaceae. The drug is carminative, diuretic, emmenagogue, stimulant and abortifacient. Useful in prevention and treatment of mild puerperal fevers. As a paste with sesame oil applied to skin diseases. Contains essential oil, toxic glucoside, melanthin, bitter substances, saponin, fixed oil, resins and tannin.

62 BLACK CATECHU :

Sanskrit : Khadira.

Tamil : Karunkaali.

Telugu : Chandra.

Kannada : Kaachu.

Malayalam : Karungali.

Hindi : Kath khair.

This consists of the heart wood of *Acacia catechu* Willd. of the Leguminosae. The drug is astringent. Contains catechin, catechu tannic acid and l-epicatechin.

63 BLACK COBRA VENOM :

Please see venom of Black cobra.

64. BLACK CUMIN SEEDS :

Please see Black caraway seeds.

65. BLACK EAGLE WOOD :

Sanskrit	: Krishna agaru.
Tamil	: Kaaragil.
Telugu	: Nalla Agar.
Kannada	: Agar.
Malayalam	: Kar-Agil.
Hindi	: Agar.

Consists of the heart wood of *Vepris bilocularis* Engler. of the Rutaceae. Wood is somewhat aromatic; dark in color. Useful in biliousness, rheumatism and asthma.

66. BLACK MUSALE :

Sanskrit	: Musalikanda, Musali.
Tamil	: Nilappanankizhangu.
Telugu	: Nelathadi Gaddalu.
Malayalam	: Nelappana.
Kannada	: Nelatadle.
Hindi	: Kaali musali.

Consists of the long tuberous roots of *Curculigo orchioides* Gaertn. of the Amaryllidaceae. Rich in starch and calcuim oxalate. Used in jaundice, asthma, gonorrhoea, skin diseases and urinary disorders. It is diuretic and aphrodisiac.

67. BLACK NIGHT SHADE :

Sanskrit	: Kakamachi.
Tamil	: Maniththakkalli.
Telugu	: Kamanchi.
Malayalam	: Mulakuthakkali.
Kannada	: Karikaachi, Kakekavaia.
Hindi	: Makoi.

This is **Solanum nigrum** Linn. of the Solanaceae. Plant is hydragogue cathartic, alterative and styptic. Useful in fevers, diarrhoea, hydrophobia, liver enlargement, blood spitting, piles and dysentery. Also laxative. Contains alkaloid solanine and also saponin.

68. **BLACK PEPPER :**

Sanskrit	: Maricha.
Tamil	: Milagu.
Telugu	: Miriyalu.
Malayalam	: Kurumilagu.
Kannada	: Karimenasu.
Hindi	: Kalamirch.

This consists of the fruits of **Piper nigrum** Linn. of the Piperaceae. The drug is aromatic, stimulant, rubefacient and alterative. Used in the treatment of cholera, vertigo, coma, dyspepsia, flatulence, fevers, paraplegia, arthritis, sore throat, piles and skin diseases. Contains alkaloids piperine, piperidine, piperitine and chavicine and essential oil.

69. **BLACK PEPPER ROOT :**

Sanskrit	: Chavica.
Tamil	: Milagu ver.
Telugu	: Chavyam.
Malayalam	: Aththitippili Veru.
Kannada	: Chavya.
Hindi	: Chab, Chavya.

This consists of the roots of the black pepper plant.

70. **BLACK SALT :**

Please see 'Vit salt'.

71. **BLACK SANDAL WOOD :**

Sanskrit	: Krishna chandana.
Tamil	: Karunchandanam.
Telugu	: Nalla Chandan.
Malayalam	: Karunchandanam.
Kannada	: Nalla Chandan.
Hindi	: Kala Chandan.

The wood is unidentified botanically.

72. **BLACK SARSAPARILLA :**

Sanskrit	: Krishna sariba.
Tamil	: Karunannari.
Telugu	: Nalla Sugandhipala.
Kannada	: Krishna sariba.
Malayalam	: Naruneendi kizangu Karuthalu.
Hindi	: Syamalata, Kaleesar.

This consists of the roots of *Ichnocarpus frutescens* R.Br. of the family Apocynaceae. It is not fragrant. Hence, some people prefer the roots of *Periploca* sp. which belongs to the family Asclepiadaceae. Attributed properties same as for Indian sarsaparilla.

73. **BLACK SULFIDE OF MERCURY :**

Sanskrit	: Khajjali.
Tamil	: Khajjali.
Telugu	: Khajjali.

Kannada : Khajjali.
 Malayalam : Khajjali.
 Hindi : Khajjali.

It is prepared by grinding mercury and sulfur until a fine black impalpable product results.

74. **BLACK TURPITH :**

Sanskrit : Syamatrivrit.
 Tamil : Karunchivadai.
 Telugu : Nalla-thagada.
 Kannada : Tigade.
 Malayalam : Nalkolpakkonna.
 Hindi : Nishot.

This consists of the roots of *Operculina turpethum* Silva Manso. of the Convolvulaceae. It is purgative and used in constipation. Contains glucoside turpethin.

75. **BLACK VETIVER :**

Please see vetiver.

76. **BOERHAAVIA :**

Please see 'Spreading hog weed'.

77. **BONDUC NUTS :**

Sanskrit : Kuberakshi.
 Tamil : Kazharchikkai.
 Telugu : Gachakaya.
 Malayalam : Kalanchikkuru.
 Kannada : Gajjakkai.
 Hindi : Kaatukaranja.

This consists of the seeds of *Caesalpinia crista* Linn. of the family Leguminosae. The kernels are antiperiodic, antipyretic, tonic and anthelmintic. Indicated to reduce scrotal swelling. Contains phytosterinin, bonducin, saponin and fatty oil.

78. BORAX :

Sanskrit	: Tankana.
Tamil	: Venkaram.
Telugu	: Veligaram.
Malayalam	: Pongaram.
Kannada	: Biligara.
Hindi	: Tincal, Sohaga.

It is sodium biborate. Borax is purified by heating it to give off the water of crystallization. Emmenagogue, astringent, sedative, diuretic and antiseptic. Used in skin diseases, puerperal convulsions, amenorrhoea and cystitis.

79. BOW STRING HEMP :

Sanskrit	: Moorva.
Tamil	: Marul.
Telugu	: Chaga.
Malayalam	: Perum Kurumba.
Kannada	: Manjinaaru.
Hindi	: Muhari.

This is *Sansevieria roxburghiana* Schult. of the Liliaceae. The rhizomes are frequently used. The juice is used in carache and to clear the throat of the viscid phelgm. Also in cases of long standing coughs and consumption.

80. **BUFFALOW :**

Sanskrit	: Mahisha.
Tamil	: Erumai.
Telugu	: Dunna Potu.
Kannada	: Emme, Kona.
Malayalam	: Potthu.
Hindi	: Bhains.

This is the Indian domestic buffalo—**Bos babulus**.

81. **BUTTER :**

Sanskrit	: Navanitha.
Tamil	: Vennai.
Telugu	: Venna.
Kanadda	: Bene.
Malayalam	: Venne.
Hindi	: Makkhan.

Consists of the butter made from cow's milk. Rancid butter should never be used.

82. **BUTTERFLY PEA :**

Sanskrit	: Shankhapushpi.
Tamil	: Kaakkanam.
Telugu	: Dintana, Sankhapushpi.
Kannada	: Sanka pushpa.
Malayalam	: Shankhapushpi.
Hindi	: Sankhahuli.

This is **Clitoria ternatea** Linn. of the Leguminosae. The roots are used as purgative and diuretic. Contains bitter principle and **tannin**.

83. BUTTER MILK :

Sanskrit	: Takram.
Tamil	: Mor.
Telugu	: Majjiga.
Kannada	: Alimajjige.
Malayalam	: Moru.
Hindi	: Chach.

Buttermilk made from cow's milk is meant

84. CALAMINE :

Please see zinc carbonate.

85. CALOMEL :

Sanskrit	: Rasakarpooora.
Tamil	: Pooram.
Telugu	: Rasakarpooram.
Kannada	: Rasakarpooram.
Malayalam	: Rasakarpooora.
Hindi	: Raskapoor.

This is mercurous chloride, a heavy, white mercury compound.

86. CALOTROPIS :

Sanskrit	: Arka.
Tamil	: Erukku.
Telugu	: Jilledu.
Malayalam	: Erikku.

This is *Calotropis gignatae* R.Br. of the family Asclepiadaceae, Diaphoretic, purgative and expectorant. The latex and roots are most often used. The plant

contains bitter resins—Akundarin and Calotropin and proteoclastic enzyme, and the poisonous principle gigan-

37. CALTROPIS :

Sanskrit	: Gokshura.
Tamil	: Nerunjil.
Telugu	: Pallaru.
Kannada	: Neggilu.
Malayalam	: Gnerinjin.
Hindi	: Gokharu.

There are two types derived from two unrelated species of plants. 1. **Small caltrops** : This consists of the spinous fruits of *Tribulus terrestris* Linn. of the Zygophyllaceae. The drug contains an essential oil, alkaloid, resins and nitrates. 2. **Large caltrops** : This consists of the fruits of *Pedaliium murex* Linn. of the Pedaliaceae. The drug is highly mucilagenous.

Vernacular names of Small caltrops are :

Sanskrit	: Gokshura.
Tamil	: Nerinchil.
Telugu	: Chinnipallaru.
Kannada	: Negillu.

Vernacular names of Large caltrops are :

Sanskrit	: Gajagokshura.
Tamil	: Aanai nerinchil.
Telugu	: Peddapalleru.
Kannada	: Aane negilu.
Hindi	: Bada ghokru.

88. CALX :

Sanskrit	: Bhasma.
Tamil	: Parpam, Neeru.
Telugu	: Bhasmam.
Kannada	: Bhasmam.
Malayalam	: Bhasmam.
Hindi	: Bhasmam.

A calx is an ash. The process of preparation by heating the material in the kiln is called as calcination. Please see chapter on Bhasma in this book.

89. CAMEL'S GALL :

Sanskrit	: Ushtrapitta.
Tamil	: Ottagappitam.
Telugu	: Vontipittam.
Kannada	: Otte Pitta.
Malayalam	: Ottakathin Pittam.
Hindi	: Oonth ka pitta.

This consists of the gall bladder and its contents of the camel — *Camelus dromodarius* Linn.

90. CAMPHOR PURE :

Sanskrit	: Karpooora.
Tamil	: Karupporam.
Telugu	: Karpura.
Kannada	: Karpura.
Malayalam	: Karupporam.
Hindi	: Kaapur.

Consists of the Natural Camphor. It is obtained from the camphor tree *Cinnamomum camphora* Nees. &

Eberm. of the family Lauraceae. The drug is sedative, antiseptic, diaphoretic and anthelmintic. It is stimulant in small doses. Also used in coughs and colds to aid expectoration.

91. CAMPHOR ZEDOARY :

Sanskrit	: Sati.
Tamil	: Kichchilikkizhangu.
Telugu	: Kachoralu.
Kannada	: Huli Arasina.
Malayalam	: Adavikachola, Cheru Kacholam.
Hindi	: Kachora, Amba Haldi.

Also called as Zerumbet zedoary. Consists of the rhizomes of *Curcuma zeodoria* Rosc. of the Zingiberaceae. Rhizomes are aromatic, cooling, diuretic, stimulant and carminative. The rhizomes contain no dye like turmeric.

92. CARBONATE OF POTASH :

Sanskrit	: Yavakshara.
Tamil	: Yavatcharam.
Telugu	: Yakshara.
Kannada	: Yakshara.
Malayalam	: Chavakaram.
Hindi	: Jowkhar.

It is stomachic, diuretic, antacid and resolvent. It is laxative in large doses. In the ancient days it was prepared by burning barley and dissolving the ashes in water and crystalizing the carbonate from the clear solution, by heating.

93. CARBONATE OF SODA :

Sanskrit	: Sarjidakshara.
Tamil	: Sajjicharam.
Telugu	: Sarjidakshara.
Kannada	: Sarjidakshara.
Malayalam	: Tuvanchilakkaram.
Hindi	: Sajjikhara.

Properties are same as that of carbonate of potash, but weaker.

94. CARBONATE OF ZINC :

Please see zinc carbonate.

95. CARDAMOMS :

Sanskrit	: Ela.
Tamil	: Yelakkai.
Telugu	: Yelamu, Yelakayalu.
Kannada	: Eleki.
Malayalam	: Yelakkai.
Hindi	: Yelaichi.

This consists of the nearly ripe, but unopened fruits of *Elettaria cardamomum* Maton. of the Zingiberaceae. This drug is also known as lesser cardamom. It is aromatic, stimulant and carminative. It contains an essential oil consisting of cineol, terpineol, terpinene, limonene, sabinene and terpineol in the form of formic and acetic acids.

Amomum subulatum Roxb. of the same family yields 'larger cardamoms'. This is known as 'stoola ela' in Sanskrit and as 'Perelam' in Tamil. The drug is inferior to the above.

It has been recorded recently that fruits of *Heraclium* spp. of the Umbelliferae are used as lesser cardamoms in certain areas in south India.

96. CASHMERE TREE :

Sanskrit	: Kashmari.
Tamil	: Kumizh, Kumizham.
Telugu	: Peg gumdi.
Kannada	: Seevani.
Malayalam	: Kumizh, Kumizham.
Hindi	: Gambaari.

There are two varieties in this. The large variety is a tree, *Gmelina arborea* Linn. and the small variety, a shrub, namely *Gmelina asiatica* Linn. The former is known as Perunkumizham in Tamil and the latter as Sirukumizham. The properties are same. The roots are used. Used in the treatment of gonorrhoea, cough, rheumatism and foetid ulcers. Also used in catarrh of the bladder. A glucoside is present.

97. CASSIA POD :

Sanskrit	: Aaragvadha, Saradha.
Tamil	: Sarakkonrai.
Telugu	: Raela chettu.
Malayalam	: Konna.
Kannada	: Kaakae mara.
Hindi	: Amaltas.

This consists of the long cylindrical fruits of *Cassia fistula* Linn. of the family Leguminosae. The pulp of the fruit is purgative. It is applied in rheumatism on

the affected area. The pulp contains rhein, oxymethyl anthraquinones 1%, sugars 50%, small amounts of volatile oil, waxy substances and resin.

98. CASSIE FLOWER TREE :

Sanskrit	: Arimeda.
Tamil	: Kastoori velan.
Telugu	: Tumma
Malayalam	: Peyvelam.
Kannada	: Kastori jali.
Hindi	: Gand babul.

This is *Acacia farnesiana* Willd. of the family Leguminosae. The bark is astringent and demulcent. Contains essential oil and tannins. Flowers possess a scent that resembles the odor of musk.

99. CASTOR :

Sanskrit	: Eranda.
Tamil	: Aamanakku.
Telugu	: Amudam.
Malayalam	: Aavanakku.
Kannada	: Haralu.
Hindi	: Erand.

This is *Ricinus communis* Linn. of the Euphorbiaceae. All parts of the plant are used in the preparation of medicines. The oil is cooling and purgative. The seeds are more poisonous than the oil obtained from the seeds, as the poisonous principle 'Ricin' resides in the oil cake.

100. CASTOREUM :

Sanskrit	: Jund.
Tamil	: Jundu.
Telugu	: Junnu.
Kannada	: Junnu.
Malayalam	: Jundu, Neernai Vidai.
Hindi	: Jund-Be-Dastar, Gandha-Bilav.

This consists of the preputial follicles and the secretions within this, obtained from **Beaver castor**. The drug is characteristically aromatic. It is claimed to be a nervine stimulant and antispasmodic. It is weaker than musk.

101. CATECHU :

Please see "Cutch".

102. CEDAR WOOD :

Sanskrit	: Devadaru.
Tamil	: Thevatharam.
Telugu	: Devadari.
Kannada	: Devadaru.
Malayalam	: Thevatharam.
Hindi	: Deodar.

This consists of the wood of **Cedrus deodora** Loud. of the Coniferae. The wood is heavy, hard, nonporous and possesses a characteristic balsamic odor. It contains an aromatic oil, gum and cholesterin. It is diuretic, diaphoretic and carminative. Used in the treatment of fever, flatulence, pulmonary and urinary disorders, rheumatism, piles, urinary calculi, skin diseases, ulcers and dysentery. It is also called as the Himalayan Cedar wood.

103. CEYLON CALUMBA :

Sanskrit	: Darvi, Darunisha, Daruharidra
Tamil	: Maramanjal.
Telugu	: Mranipasupu.
Kannada	: Marada arisina.
Malayalam	: Maramanjal.
Hindi	: Darihaldu.

Consists of the stems of *Coccinium fenestratum* Colebr. of the family Menispermaceae. The stems show an yellow cut surface with radial rays. Bitter, tonic, stomachic and antiperiodic. Useful in dysentery, ulcers and intermittent fevers. Properties similar to berberis. Contains berberine upto 3.5%. Also contains saponin, ceryl alcohol, sitosterol, hentriacontane, palmitic acid, oleic acid, sitosterol, glucoside and resinous matter.

104. CEYLON CAPER :

Tamil	: Aathondan.
Telugu	: Aridonda.
Malayalam	: Kathotti.

The roots and seeds of *Capparis zeylanica* Linn. of the Capparidaceae are used. The drug is sedative, stomachic and antihidrotic. Used in cholera. It contains an alkaloid, a phytosterol, mucilagenous matter and water soluble acid.

105. CHAULMOOGRA SEEDS :

Sanskrit	: Tuvaraka beeja.
Tamil	: Neeradimuththu.
Telugu	: Neerudu.
Kannada	: Sarvolu.
Hindi	: Jangli Badam.

This consists of the seeds of *Taraktogenos kurzii* King. of the Flacourtiaceae. Other species of the same genus are also used. Useful in leprosy and skin diseases. Seeds contain an oil with hydnocarpic acid, gorlic acid, chaulmoogric acid, palmitic acid and oleic acid. Also contains lower homologues of chaulmoogric acid.

106. CHEBULIC MYROBALANS :

Sanskrit	: Hareetaki.
Tamil	: Kadukkai.
Telugu	: Karakaya.
Malayalam	: Kadukka.
Kannada	: Hirda.
Hindi	: Harda.

Consists of the fruits of *Terminalia chebula* Retz. of the family Combretaceae. The drug is astringent, alterative, and also laxative. The laxative effect is due to the anthraquinone predominating in the ripe fruits. A decoction useful in washing ulcers, and for gargling in stomatitis. A powder is used as dentifrice in carious teeth and bleeding gums. Contains tannic acid upto 40% and chebulic acid, gallic acid and anthraquinone like principle.

107. CHINA ROOT :

Sanskrit	: Madhusnuhi.
Tamil	: Parangichchakkai.
Telugu	: Pirangichekka.
Kannada	: Chinipavu.
Malayalam	: Pavu.
Hindi	: Chobchini.

Consists of the roots of *Smilax china* Linn. of the Smilacaceae. The drug is aphrodisiac, sudorific, demulcent and alterative.

Useful in chronic rheumatism, syphilis, and skin diseases.

Contains saponin. Ramstad records that the use of this drug with mercury, increases the absorption of mercury.

108. CHINESE GALLS :

Sanskrit	: Karkatakasringi.
Tamil	: Karkatakasringi.
Telugu	: Kakdaseeng.
Kannada	: Kakdaseeng.
Malayalam	: Kakdaseeng.
Hindi	: Kakdaseeng.

Also called as the Japanese galls. The gall is produced by the activity of larvae of *Melaphis chinensis* Bell. on the petiole of the leaf of *Rhus semialata* Murray. of the family Anacardiaceae. The galls are finger-like and irregular in shape, with a central hollow. Contains gallotannic acid upto 70%. The drug is esteemed as an astringent.

109. CHIRATA :

Sanskrit	: Kiratatikā, Bhoonimba.
Tamil	: Ni'avembu.
Telugu	: Nelavemu, Neelavermu.
Malayalam	: Ni'aveppu, Kiriyaattu.
Kannada	: Nilabevu.
Hindi	: Chiraita.

The herb of **Swertia chirata** Buch-Ham. is used as chirata. It is bitter and reputed as tonic. Contains bitter substance chiratin and ophelic acid. In the southern states, sometimes, **Andrographis paniculata** Nees. is used. Attributed properties are same. This contains kalmeghin and bitter substance named andrographolide. **Swertia** belongs to the family **Gentianaceae** and **Andrographis** belongs to the family **Acanthaceae**.

110. CINCHONA :

Please see 'Cinchona febrifuge'.

111. CINCHONA FEBRIFUGE :

Cinchona febrifuge consists of the residue of alkaloids that are left after the removal of bulk of quinine from the total alkaloids. It contains alkaloids cinchonine, quinidine, cinchonine etc. The drug is obtained from **Cinchona** species like **C. succirubra** Pavon. and **C. ledgeriana** Moens. Cinchona belongs to the family **Rubiaceae**.

112. CINNABAR :

Sanskrit	: Hingula.
Tamil	: Lingam.
Telugu	: Ingileekam.
Kannada	: Inguliyaka.
Malayalam	: Chayilyam.
Hindi	: Hingool.

Cinnabar is the ore of mercury. Chemically it is the red sulfide of mercury. It is restorative, alterative and tonic. Used in syphilis, diarrhoea, fever, consumption and asthma. Cinnabar is purified by sublimation.

113. CINNAMON BARK :

Sanskrit	: Lavanga twak.
Tamil	: Lavangappattai.
Telugu	: Dasinachekka.
Kannada	: Taj.
Malayalam	: Ilavangatholi.
Hindi	: Dalchini.

This consists of the bark from coppice shoots of *Cinnamomum zeylanicum* Blume. of the Lauraceae. Also called as Ceylon cinnamon. It is aromatic, stimulant, astringent and carminative. Contains essential oil with aldehydes. Contains eugenol. *C. Cassia* Blume. is also used.

114. CINNAMON LEAVES :

Sanskrit	: Patra.
Tamil	: Lavangappattiri.
Telugu	: Thamalapattram.
Kannada	: Patra.
Malayalam	: Pacchila.
Hindi	: Tejpat.

Consists of the leaves of the cinnamon tree. Carminative, astringent, aromatic and stimulant. Please see cinnamon bark.

115. CITRON :

Sanskrit	: Matulunga.
Tamil	: Thurinjippazham.
Telugu	: Mathulungamu.
Kannada	: Madeephalamu.
Malayalam	: Matala Narakam.
Hindi	: Turanj, Biyowra.

These are fruits of *Citrus medica* Linn. of the Rutaceae. The juice is used in medicine. Aromatic, anti-toxic, digestive, astringent and refrigerent. Also anti-scorbutic because of its vitamin-C content.

116. CIVET :

Sanskrit	: Gandhamarjara veerya.
Tamil	: Punugu.
Telugu	: Punugu.
Kannada	: Javaji.
Malayalam	: Veruku, Puzugu.
Hindi	: Jubad.

Consists of the secretion from the civet glands of the civet cat, *Viverra zibetha* Linn. The secretion is a thick dark liquid which later hardens. It has the odor of musk. Contains civetone. It is used as aromatic, aphrodisiac and antispasmodic. The female cat produces more civet than the male.

117. CLEARING NUT :

Please see 'Nux potatorum'.

118. CLIMBING BITTER SWEET :

Sanskrit	: Jyotishmati.
Tamil	: Vaaluluval.
Telugu	: Malkangini Vittulu.
Kannada	: Kowgu, Kariganne.
Malayalam	: Valulavam, Cheruppunna.
Hindi	: Malkangani.

This consists of the fruits of *Celastrus paniculata* Willd. of the Celastraceae. Also called as the staff tree

seeds. The drug is bitter, laxative, emetic and stimulant. Useful in gout, rheumatism, leprosy, paralysis and fevers. Contains alkaloid, glucoside and coloring matter. Formic, acetic and benzoic acids are also present. Celastrine is the alkaloid that stimulates the brain without a secondary depression. Another alkaloid is paniculatine.

119. CLIMBING NETTLE ROOTS :

Sanskrit	: Dhanvayasava.
Tamil	: Poonaiikkanchori ver.
Telugu	: Chinadulagondi.
Kannada	: Kiruberalu, Akurabaru.
Malayalam	: Soriyanam ver, Chenkodithoova.
Hindi	: Dharnasa.

This consists of the roots of the common stinging nettle that grows on the plains. It is *Tragia involucrata* Linn. of the Euphorbiaceae. The drug is diaphoretic, alterative and useful in leprosy. In some localities, the roots of cowhage are used.

120. CLOVES :

Sanskrit	: Lavanga.
Tamil	: Lavangam, Kiraambu.
Telugu	: Lavangalu.
Kannada	: Lavanga.
Malayalam	: Karayambu.
Hindi	: Lowng.

Consists of the flower buds of *Syzygium aromaticum* Merr. & L. M. Perry. of the Myrtaceae. A good sample is characterised by the presence of the dome of petals

intact and by the exudation of oil from the stalk when indented by the finger nail. Exhausted worthless stuff has decapitated buds and donot exude oil. The essential oil contains eugenol. The drug is aromatic, stimulant, carminative and expectorant. Useful in colds, flatulence and dyspepisa.

121. COBRA :

Please see 'Black Cobra'.

122. COCCINIA CORDIFOLIA :

Sanskrit	: Bimbi.
Tamil	: Kovvai.
Telugu	: Donda.
Malayalam	: Kovval.
Kannada	: Donda.
Hindi	: Kanduri.

Coccinia cordifolia Cogn. is a common Cucurbitaceus climber of the Indian plains. It is useful in the treatment of eruptions of skin, gonorrhoea and diabetes.

123. COCCULUS INDICUS :

Sanskrit	: Kakanasa.
Tamil	: Kaakkaikkollividai.
Telugu	: Kakmari, Kowa-todhi.
Malayalam	: Garaphala, Valiya Kakkottondi.
Kannada	: Hiriya Kagedonde.
Hindi	: Kakmari, Kowa-todhi.

Consists of the seeds of *Anamitra paniculata* W & A. of the Menispermaceae. Used in phthisis to check night

sweating. Useful in destroying pediculi when applied as ointment. The drug contains picrotoxin, cocculin, anamitrin, menispermene, and paramenispermene. Picrotoxin is exceedingly toxic. The drug is often not used as it is highly poisonous.

124. COCONUT :

Sanskrit	: Narikela.
Tamil	: Thenkai.
Telugu	: Tenkaya.
Malayalam	: Thengu, Narikelam.
Kannada	: Tenkay.
Hindi	: Nariel.

This is *Cocos nucifera* Linn. of the Palmaceae. The fruit and oil are mostly used. The kernel is highly nutritive. Copra is the ripe, dry kernel. Oil is extracted from copra. The tender coconut water is also used in medicine. The material is refrigerent, astringent and diuretic.

125. COLDENIA PROCUMBENS :

Sanskrit	: Hamsapadi.
Tamil	: Seruppada.
Telugu	: Hamsapadamu.
Kannada	: Nabiladi.
Malayalam	: Cherupulladi.
Hindi	: Hansraj.

Coldenia procumbens Linn. is used instead of 'Adiantum' in south Indian plains. Please see 'Adiantum'.

126. **COLOCYNTH :**

Sanskrit	: Indra varuni.
Tamil	: Kumatti.
Telugu	: Chedupuchcha.
Malayalam	: Peykumatti.
Kannada	: Haavumakki.
Hindi	: Maakaal, Indrayan.

The drug consists of the fruits of **Citrullus colocynthis** Schrad. of the Cucurbitaceae. Sometimes the whole herb is used. Colocynth is a gastrointestinal stimulant or irritant, and one of the most powerful and well known purgatives, acting as a hydrogogue cathartic. Indicated to produce free evacuation of bowels in bilious derangement of chronic constipation. It is seldom prescribed alone as it causes griping. Used also in rheumatism and jaundice. The drug contains alkaloid, citrullol and cucurbitacins. The alkaloid is purgative.

127. **COLOPHONY :**

Sanskrit	: Srivasaniryasa.
Tamil	: Tiruvattapisin.
Telugu	: Sriveshtak.
Malayalam	: Tiruattappisin.
Kannada	: Sriveshtak.
Hindi	: Gandhabiroza.

This consists of the resinous exudate with turpentine from various species of **Pinus**. Turpentine is distilled and colophony is separated. It is like amber resin. Some people use 'galbanum' obtained from **Ferula galbaniflua** Boiss. et Buhse of the family Umbelliferae. This is 'Gandeferoza' of the Indian Market. The drug is stimulant and diuretic. Used also in plasters.

128. COMMON ALUMN :

Sanskrit	: Sphatika.
Tamil	: Padikaram.
Telugu	: Padikaram.
Kannada	: Phatki.
Malayalam	: Padikkaran.
Hindi	: Phatkari.

This is the common alun used in washing wounds and ulcers and sometimes eyes, in weak solution. Given internally also. Usually potassium alun is used as it is known from very ancient times. Now a days, ammonium alun is used because of its cheapness.

The drug is astringent, haemostatic, antiseptic and antispasmodic. Checks diarrhoea in small doses, but acts as purgative in larger doses.

129. COMMON FIG :

Sanskrit	: Udumbara.
Tamil	: Aththi.
Telugu	: Mari.
Malayalam	: Athiyal.
Kannada	: Athi.
Hindi	: Gular, Gullar.

This is *Ficus racemosa* Linn. of the Moraceae. The bark is astringent. The root is useful in dysentery, and diabetes. The fruit is stomachic, carminative and astringent. Given in menorrhagia and haemoptysis.

130. COMMON SALT :

Sanskrit	: Samudra lavana.
Tamil	: Sottruppu, Kadal uppu.
Telugu	: Upu.

Kannada	: Badagaralavana.
Malayalam	: Kadaluppu.
Hindi	: Samudranon.

This consists of the salt obtained from sea water. Major part is sodium chloride.

131. COMMON YELLOW NAIL DYE PLANT :

Sanskrit	: Sahachara.
Tamil	: Chemmulli.
Telugu	: Mullugoranta.
Malayalam	: Mulkkurunji.
Kannada	: Kuruntaka.
Hindi	: Kaat saraya.

This is *Barleria prionitis* Linn. of the Acanthaceae. Roots used in dropsy, cough and anasarca. Applied externally as paste to disperse boils and glandular swellings. Contains alkaloid and good amount of potassium.

132. CONCH SHELL :

Sanskrit	: Shankha.
Tamil	: Sangu, Kadal sangu.
Telugu	: Sankhamu.
Malayalam	: Sangu, Kadal sangu.
Kannada	: Sankhe.
Hindi	: Shankha.

Consists of the shells of various conch species. Actually the sacred conch shell, *Xonchus pyrum*, should be used after removing the animal from inside. Major amount is calcium carbonate.

133. COPPER :

Sanskrit	: Tamra.
Tamil	: Taamiram, Sembu.
Telugu	: Ragi.
Malayalam	: Chembu.
Kannada	: Taambra.
Hindi	: Taamba.

This is metallic copper. The copper leaves are used in medicine. Astringent, sedative, antispasmodic, alterative, purgative and emetic.

134. COPPER PYRITES :

Sanskrit	: Swarnamakshika.
Tamil	: Pon nimilai.
Telugu	: Swarnamakhi.
Kannada	: Dhatumakshike.
Malayalam	: Makkirakhallu.
Hindi	: Sonamakhi.

This is an ore of copper. It is crystalline, brass yellow when freshly broken, later becoming covered with an iridescent tarnish. Lustre metallic and streak black.

135. COPPER SULFATE :

Sanskrit	: Mayurathutha.
Tamil	: Mayilthuththam.
Telugu	: Melatutu.
Kannada	: Mayuruthutha.
Malayalam	: Mayilthuththam.
Hindi	: Tootiya.

Occurs in commerce as blue crystals. On heating, the water of crystallization is lost and a white powder results. It is astringent in small doses. Emetic and toxic in larger doses. Antiseptic. Used in lotions for washing wounds and ulcers.

136. COPRA :

Sanskrit	: Khubara.
Tamil	: Kopparaitthenkai.
Telugu	: Endu-kobbari.
Kannada	: Sushka narikela.
Malayalam	: Kopparai.
Hindi	: Khopra.

This consists of the dry kernel of the ripe coconut fruit. It is oily. Highly nutritive.

137. CORALS :

Sanskrit	: Pravala.
Tamil	: Pavazham.
Telugu	: Pagadalu.
Kannada	: Avabhavata.
Malayalam	: Pavilam.
Hindi	: Moonga.

Corals are of many types and exclusively marine. Two types are used in Indian medicine. One is lumpy and highly porous and rosy in color. The other is slender, hard and nearly red in color. The former is cheaper and the latter costly. The color of corals is due to a pigment. Corals contain calcium as bulk and small amounts of magnesium, iron and phosphorus. Calcined corals are indicated in piles, coughs and tuberculosis.

138. CORIANDER SEEDS :

Sanskrit	: Dhanyaka.
Tamil	: Koththamalli.
Telugu	: Dhaniyalu.
Kannada	: Kothambari.
Malayalam	: Kothampalari.
Hindi	: Dhaniya.

Consists of the fruits of **Coriandrum sativum** Linn. of the family Umbelliferae. The drug is aromatic stimulant, carminative, diuretic, tonic, stomachic, antibilious, refrigerent and aphrodisiac. Contains vitamin C, carotene, essential oil with coriandrol and a fatty oil.

139. COSTUS ROOTS :

Sanskrit	: Koshta.
Tamil	: Kottam, Koshtam.
Telugu	: Chengalakushta.
Kannada	: Koshta.
Malayalam	: Kottam.
Hindi	: Kooth.

This consists of the roots of **Saussurea lappa** C. B. Clarke. of the Compositae. Antiseptic and dis-infectant. Relaxes the involuntary muscles. Cardiac stimulant, carminative, expectorant and diuretic. Controls attacks of bronchial asthma. Useful also in persistent hiccup, cholera, coughs, chronic skin diseases and rheumatism. Contains essential oil, alkaloid, saussurine and a bitter resin.

140. **COTTON SEEDS :**

Sanskrit	: Karpasa beeja.
Tamil	: Paruththi vidai.
Telugu	: Pathi beejalu.
Kannada	: Hathi beeja.
Malayalam	: Noolparuthikura.
Hindi	: Kapas ka beeje.

Consists of the seeds of **Gossypium arboreum** Linn. of the Malvaceae. Nutritive and emollient. Useful in gonorrhoea, gleet, chronic cystitis, catarrh, consumption and rheumatism.

141. **COUNTRY MALLOW :**

Sanskrit	: Atibala.
Tamil	: Thuththi.
Telugu	: Tuthibenda.
Kannada	: Thuthigida.
Malayalam	: Urakam, Tuthi.
Hindi	: Kanghi.

This is **Abutilon indicum** Sw. of the Malvaceae. The whole plant is useful in medicine. It is cooling, demulcent and aphrodisiac. Also diuretic. Used in gonorrhoea, leucorrhoea and scalding urine. Contains mucilage and asparagin.

142. **COW :**

Sanskrit	: Go.
Tamil	: Pasu.
Telugu	: Aavu.
Kannada	: Akala.
Malayalam	: Pasu.
Hindi	: Gai.

This is the domestic cow, **Bos taurus** Linn. Its milk, curd, buttermilk, butter, ghee, urine, dung and gall stone are used in medicine.

143. COW HAGE :

Sanskrit	: Atmagupta.
Tamil	: Poonaiikkali.
Telugu	: Kaila, Adugu.
Malayalam	: Naikoma, Naikkoruna.
Kannada	: Nai sonnu balli, Nasugunni.
Hindi	: Kownch.

Also called as the cow itch. The seeds and roots are medicinal. It is **Mucuna prurita** Hook. of the Leguminosae. Seeds are aphrodisiac, nervine tonic and anthelmintic. Roots are purgative. A paste is applied in dropsy. An infusion given with honey in cholera. Seeds contain an oil and alkaloids mucunine and mucunadine.

144. COWRIE SHELLS :

Sanskrit	: Varata, Varatika.
Tamil	: Chozhi, Palakarai.
Telugu	: Gavvalu.
Kannada	: Kavadi.
Malayalam	: Kavati.
Hindi	: Kowdi

These are the shells of **Cyprea moneta** L. A calx is used in gonorrhoea and scalding.

145. CRATAEVA :

Sanskrit	: Varuna.
Tamil	: Maaviṅgam.
Telugu	: Varna, Urumatti.
Malayalam	: Nirmathalam.
Kannada	: Madavasale, Narumbele.
Hindī	: Barna.

This is *Crataeva religiosa* Forst. of the Capparidaceae. The bark and root are used in medicine, as diuretic and lithontriptic. Also used in internal inflammations. Contains saponin and tannin.

146. CRESS SEEDS :

Sanskrit	: Ashali.
Tamil	: Asali vidai.
Telugu	: Asali Vithulu.
Hindī	: Haalim

Consists of seeds of *Lepidium sativum* L. of the Cruciferae. Used as a lactagogue. In good doses causes abortion. Plant contains essential oil and glucoside glucotropoeolin.

147. CREYAT :

Please see Chirata.

148. CROCODILE :

Sanskrit	: Nakra.
Tamil	: Mudalai.
Telugu	: Mosali.

Kannada : Mosalo.
 Malayalam : Mutala.
 Hindi : Magar.

This is the common Indian Crocodile *Crocodilus palustris* L. Their bile and flesh are used in medicine.

149. **CROTON :**

Sanskrit : Danti, Jayaphala.
 Tamil : Nervalam.
 Telugu : Naepala.
 Kannada : Japala.
 Hindi : Jamalgotta.

This is *Croton tiglium* Linn. of the Euphorbiaceae. The seeds and roots are emetic and highly purgative. Seeds contain 55 to 57% of oil. The oil contains toxic resin, purgative and vesicant principles, toxic proteins, sucrose and a glycoside crotonoside. Sometimes, *Baliospermum montanum* Muel. - Arg. is used.

150. **CUBEBS :**

Sanskrit : Sugandhamaricha, Lankesa.
 Tamil : Vaalmilagu.
 Telugu : Chavala miriyalu.
 Kannada : Baala menasu.
 Malayalam : Cheenoshanam.
 Hindi : Kababchini.

The drug consists of dried unripe fruits of *Piper cubeba* Linn. f. the Piperaceae. Also called as the tail-eḍ pepper. Known as a spice. Used as an anticatarrhal agent and as a kidney stimulant. Contains essential oils with cubebin.

151. CUBEES ROOT :

The roots of **Cubeba** or the roots of black pepper are used. It is most often the latter. Used in coughs colds and bronchitis. Please see Black pepper roots.

152. CUDAPPAH ALMOND :

Sanskrit	: Priyala.
Tamil	: Saaraapparuppu.
Telugu	: Saarapapu.
Kannada	: Murkali, Charaveeja.
Malayalam	: Charamparippu.
Hindi	: Chirownji.

The drug consists of the seed kernels of **Buchanania** *lanceolata* Spreng. of the Anacardiaceae. The tree is found in deciduous forests. Considered equivalent to almond kernels. Contains oil. Nutritive.

153. CUMIN SEEDS :

Sanskrit	: Jeeraka.
Tamil	: Cheerakam.
Telugu	: Jilakarra.
Kannada	: Jirike.
Malayalam	: Jeeraka.
Hindi	: Zeera.

Consists of the fruits of **Cuminum cyminum** Linn. of the Umbelliferae. Stimulant, carminative, aromatic and stomachic. Used in diarrhoea and dyspepsia. Contains essential oil with cumaldehyde along with quantities of terpenes and cuminic alcohol etc. Contains also 10% of fatty oil and 6.7% of pentosan.

154. CURD AND SUPERNATANT :

Sanskrit	: Dadhi, Mastu.
Tamil	: Thayir, Thayir thelivu.
Telugu	: Perugu theta.
Kannada	: Mosara neera.
Melayalam	: Thayir vellam.
Hindi	: Dahi ka pani.

Curd prepared from cow's milk is used. For obtaining the supernatant the fermented curd is strained or the curd is hung in a fine cloth bag and the liquid dripping therefrom is collected. Also called as whey in English. It is highly cooling in action.

155. CUTCH :

Sanskrit	: Khadirasara.
Tamil	: Kaasukkatti.
Telugu	: Kachu.
Kannada	: Kath.
Malayalam	: Kathu.
Hindi	: Katha.

Also called as black cutch. It is the dried extract from the heart wood of *Acacia catechu* Willd. It occurs as black, light, angular pieces or blocks in commerce. Contains nearly 50% of catechutannic acid, and catechol and quercetin and catechu red. The drug is astringent, cooling and digestive. Used in cough and diarrhoea. Employed as an application to ulcers and boils and inflammatory eruptions. When it is mentioned as 'white cutch' a different drug is meant. Please see 'Gambier'.

156. **CUTTLE FISH BONE :**

Sanskrit	: Samudra phena.
Tamil	: Kadal nurai.
Telugu	: Sorrapiyya.
Kannada	: Kandalanagale.
Malayalam	: Katal nura.
Hindi	: Samudar ka phen.

This is a calcareous biscuit like body, found in the dorsum of the Cuttle fish — *Sepia officinalis* Linn. which is available in the seas surrounding peninsular India, in abundance. The 'bone' is either collected from the animals in the catch or from the seashore when they are washed ashore. Also called 'os sepiae'. The elliptic bone has a sharp beak. The drug is porous, layered and brittle. It contains calcium carbonate, phosphate and some sulfate. It is an antacid and local sedative. The powder is given internally in sprue and dysentery.

157. **DATE FRUITS :**

Sanskrit	: Kharjura phala.
Tamil	: Pereechampazham.
Telugu	: Peridu, Kharjurapu pandu.
Kannada	: Karjura.
Malayalam	: Ittapalam.
Hindi	: Pindakhajoor.

These consists of the dry date fruits. The source plant is *Phoenix dactylifera* Linn. of the Palmaceae. The drug is demulcent, expectorant, nutrient, laxative and aphrodisiac. Given in asthmatic affections, coughs, fever and gonorrhoea. Contains sugars and vitamins a, b and d.

158. **DATURA :**

Sanskrit	: Datura.
Tamil	: Oomaththan.
Telugu	: Oometha.
Kannada	: Oomaththa, Madakunike.
Malayalam	: Ummaththam.
Hindi	: Datura.

Datura fastuosa Linn., **Datura stramonium** Linn. and **Datura innoxia** Mill. are used in Indian Medicine, depending on the availability of any one or more of these species. In some species, purple and polyploid varieties are also met with. All parts of the plant are medicinal. Used as antispasmodic, anodyne and narcotic. Useful also in skin diseases, fevers and diarrhoea. The drug contains a number of alkaloids, scopolamine, hyoscyamine, hyoscine and atropine.

159. **DEAD NETTLE WHITE :**

Sanskrit	: Dronapushpi.
Tamil	: Thumbai.
Telugu	: Thummachettu.
Kannada	: Thumbae.
Malayalam	: Thumpa.
Hindi	: Gooma.

This is **Leucas aspera** Spreng. of the Labiatae. Antipyretic. Used in fevers, cold, psoriasis, scabies and chronic skin eruptions. Leaves considered useful in chronic rheumatism. Leaves contain glucoside and essential oil.

160. **DEER :**

Sanskrit	: Saranga.
Tamil	: Maan.
Telugu	: Duppi.
Kannada	: Saranga.
Malayalam	: Maan.
Hindi	: Harin.

This * *Cervus dama* Linn. which is the common deer with branched antlers or horns.

161. **DILL SEEDS :**

Sanskrit	: Sathapushpa.
Tamil	: Sadakuppai.
Telugu	: Sadapa.
Kannada	: Sabbaseege.
Malayalam	: Satakuppa.
Hindi	: Soya.

This consists of the fruits of *Anethum sowa* Kurz. of the Umbelliferae. The drug is carminative and stoma-
chic. Useful in flatulence. Seeds contain essential oil with alpha and beta pinene.

162. **DITA BARK :**

Sanskrit	: Saptaparna twak.
Tamil	: Ezhilampalai Pattai.
Telugu	: Edakula Ponna.
Kannada	: Elelega.
Malayalam	: Yelilampal.
Hindi	: Chhativan.

This consists of the bark of *Alstonia scholaris* R.Br. of the Apocynaceae. The bark is tonic, alterative, anti-periodic and febrifuge. Used in the treatment of dysentery, diarrhoea and malarial fever. Contains echitenine, ditamine, echitamine and echitamidine. In malaria, it is of doubtful value according to Chopra.

163. DOG BAMBOO ROOTS :

Please see 'roots of five grasses'.

164. DOG TONGUED MILK HEDGE :

Sanskrit	: Patrasnuhi.
Tamil	: Ielaikkalli.
Telugu	: Akujumudu.
Kannada	: Ielaikkalli.
Malayalam	: Yelakkalli.
Hindi	: Thohar.

This is *Euphorbia nerifolia* Linn. of the Euphorbiaceae. Purgative, expectorant and rubefacient. Used in skin diseases also for external application.

165. DOMESTIC FOWL :

Sanskrit	: Kukuta.
Tamil	: Kozhi.
Telugu	: Kedi.
Kannada	: Koli.
Malayalam	: Koli.
Hindi	: Murgi.

The domestic fowl is *Gallus domesticus* Linn. The eggs and gall bladder are used in medicine.

166. DROSS IRON :

Sanskrit	: Mandoora.
Tamil	: Ierumbuchittam.
Telugu	: Loha kittam.
Kannada	: Loha kitta.
Malayalam	: Ierumbin kittam.
Hindi	: Loh ka Mail.

This consists of the refuse obtained in smelting iron in the kilns or hearths. It contains elemental iron and various amounts of iron oxides and carbon. Made in to a calx, it is used in the treatment of anaemia.

167. DRUM STICK :

Sanskrit	: Sigru.
Tamil	: Murungai.
Telugu	: Munaga.
Kannada	: Nuggae.
Malayalam	: Murunga.
Hindi	: Sahinjan.

This is *Moringa oleifera* Lam. of the Moringaceae. It is also called as the horse radish tree. The seeds, leaves, gum and the bark are used in medicine. The seeds are used in the treatment of venereal disease. The bark is antibiotic and finds use in skin diseases and tetanus. Gum used for carious teeth. All parts of the plant are useful in the treatment of rheumatism, and as antispasmodic. The bark is said to be useful in causing abortions. Contains alkaloids moringine and moringinine. Pterygospermine is the antibiotic principle which is active against gram positive, gram negative and acid fast bacteria.

168. DRY GINGER :

Sanskrit	: Sunti.
Tamil	: Chukku.
Telugu	: Sunti.
Kannada	: Sunti.
Malayalam	: Chukku.
Hindi	: Sont.

This consists of the dried rhizomes of *Zingiber officinale* Rosc. of the Zingiberaceae. The rhizomes are scraped of their skin before drying. Lime is used as dust as perservative. The drug is pungent and aromatic. It dilates the blood vessels, causes warmth, increases perspiration, brings down temperature in fevers, and serves as stimulant, digestive and carminative. Contains essential oil with camphene, beta phellandrene, and zingiberene. Cineol, citral, borneol are also present. Gingerol and shogaol are the pungent principles. It also contains potassium oxalate.

169. DUNG :

Sanskrit	: Gomaya.
Tamil	: Pasunchaanam.
Telugu	: Gosana.
Kannada	: Gomaya.
Malayalam	: Sanakam.
Hindi	: Gobar.

Unless otherwise mentioned, cow dung is used in medicine, most commonly. It is required to purify some of the poisonous drugs. Dry dung cakes are used as fuel for the kilns that are used for calcination of metals and minerals in the Indian Systems of Medicine.

170. EAGLE WOOD :

Sanskrit	: Agar.
Tamil	: Agil kattai.
Telugu	: Agar, Agar.
Kannada	: Agar, Agar.
Malayalam	: Akol.
Hindi	: Agar, Agar.

This consists of the wood of **Aquilaria agallocha** Roxb. of the Thymelaeaceae. Also called as wood agallochum. The drug is aromatic astringent and stimulant. Used to stop diarrhoea and vomiting. Contains an essential oil.

171. EARTH WORM :

Sanskrit	: Bhoonaga.
Tamil	: Manpuzhu.
Telugu	: Bhoonagam.
Kannada	: Bhoonagam.
Malayalam	: Bhoonagam.

This usually consists of the **Megascolex** spp. available in moist soils in India.

172. EAST INDIAN ROSE BAY :

Sanskrit	: Nandi pushpa.
Tamil	: Nandiyavattai.
Telugu	: Maddarasa gida.
Kannada	: Maddarasa gida.
Malayalam	: Nandiyavartam.
Hindi	: Nandivardhanam.

This is *Tabernaemontana coronaria* r.Br. (Syn : *Ervataemia coronaria* Stapf. of the Apocynaceae). Usually grown as ornament. The flowers are used in the diseases of the eye. The root is acrid and is chewed in tooth ache. The bark contains a crystalline substance and alkaloids tabernaemontanine and coronarine.

173. ECLIPTA PROSTRATA :

Sanskrit	: Bhringaraja.
Tamil	: Karisalankanni.
Telugu	: Guntakalagara.
Malayalam	: Kayyonni.
Kannada	: Garugalu.
Hindi	: Bhangra.

The whole herb of *Eclipta prostrata* L. is used. This belongs to the family Compositae. The plant is tonic and deobstruent in the enlargement of liver and spleen. It is used in catarrh and jaundice also. The root is emetic. Contains alkaloids ecliptine and nicotine.

174. EGG AND EGG SHELLS :

Sanskrit	: Anda.
Tamil	: Kozhimuttai, Muttai odu.

The egg of the domestic fowl is tonic and nutritive. The shells contain major amount of calcium.

175. EIGHT DRUGS :

Sanskrit : Ashtavarga.

This constitutes a group of eight drugs of vegetable origin. The identity of some is still doubtful. Hence substitutes are preferred.

Drug	Substitute.
1. Meda.	} Asparagus roots.
2. Mahameda.	
3. Rishabhaka.	} Alligator yam.
4. Jeevaka.	
5. Kakoli.	} Withania roots.
6. Ksheerakakoli.	
7. Riddhi.	} Black musale roots.
8. Vriddhi.	

176. EKANAYAKAM :

Sanskrit : Ekanayakam.

Telugu : Ekanayakam.

Malayalam : Ekanayakam.

Kannada : Gandubigge.

This is a Malabar drug. It is tentatively referred to *Salacia reticulata* Wight. of the Celastraceae. The drug is used in gonorrhoea, rheumatism and skin diseases.

177. ELAVALUKAM :

Sanskrit : Elavalukam.

Malayalam : Elavalukam.

This is unidentified.

178. ELEPHANT :

Sanskrit	: Gaja, Hasti.
Tamil	: Aanai, Yaanai
Telugu	: Eenuga.
Kannada	: Aanae.
Malayalam	: Aanae.
Hindi	: Haathi.

By this, the Indian Elephant is meant. It is *Elephas maximus* Linn. The bones, teeth, gall bladder etc. are used in medicine. The tooth or ivory is given as astringent and in leucorrhoea. It is also given in jaundice and to remove sterility in females. The faecal matter excreted by the elephant calf as soon as it is born, is used in medicine and is sold under the Indian bazaar name — Kantivenna.

179. ELEPHANT FOOT YAM :

Sanskrit	: Soorna.
Tamil	: Chenaikkizhangu.
Telugu	: Durada kanda.
Kannada	: Sooram.
Malayalam	: Chena.
Hindi	: Sooran, Zami kand.

This is the tuber of *Amorphophallus Campanulatus* Blume. The tuber is stomachic, tonic and carminative. Much used in the treatment of piles and also in dysentery. Contains an enzyme and calcium oxalate.

180. ELEPHANTOPUS SCABER :

Sanskrit	: Gojivha.
Tamil	: Yaanaichchuvadi.
Telugu	: Edunaluka chettu.

Kannada	: Yalunalage.
Malayalam	: Aanachuvadi.
Hindi	: Hastipada.

Elephantopus scaber Linn. is a Compositae member, with a basal rosette of leaves and a paniced shoot with capitula. The whole plant is astringent, antipyretic and cardiac tonic. The root is useful in dysurea and painful swelling of stomach. **Leaves boiled in oil** are used in skin diseases. Total alcoholic extract of the plant is shown to have antibiotic activity.

181. EMBELIA FRUITS :

Sanskrit	: Vidanga.
Tamil	: Vaayuvidangam.
Telugu	: Vaayuvidangam.
Kannada	: Vaayuvidangam.
Malayalam	: Vizhaal ari.
Hindi	: Barberang.

This consists of the fruits of **Embelia ribes** Burm. f. of the Myrsinaceae. The drug is reputed as an efficient anthelmintic. It is also astringent and antipyretic. Contains embelic acid, embelin, quercitol and an alkaloid christembine and resinous and volatile materials. Used in the treatment of ascariasis. The water extract is antibacterial against **Staphylococcus aureus** and **Escherichia coli**.

182. EMBLIC MYROBALAN :

Sanskrit	: Amlaki.
Tamil	: Nellikkaai.
Telugu	: Amalakamu.

Kannada	: Amalaka.
Malayalam	: Nelli.
Hindi	: Aavnla.

This consists of the ripe fruits of *Emblica officinalis* Gaertn. of the Euphorbiaceae. Fruit is refrigerent, diuretic and laxative. In combination with iron, used in anaemia and jaundice. Also antiscorbutic. Contains tannin, pectin and ascorbic acid.

183. EUPHORBIA HERB :

Sanskrit	: Ksheerini, Dugdika.
Tamil	: Amman pachcharisi.
Telugu	: Reddivarinanubalu.
Kannada	: Akkigida, Marija banige.
Malayalam	: Nelapaalai.
Hindi	: Doodhi.

This consists of the whole herb of *Euphorbia hirta* Linn. of the family Euphorbiaceae. It is used in dysentery, asthma and worms in the stomach. Contains an alkaloid xanthorhamnin, an essential oil and active principles one of which has a relaxing action on smooth muscle.

184. EVOLVULUS ALSINOIDES :

Sanskrit	: Vishnukranti.
Tamil	: Vishnukirandi.
Telugu	: Vishnukranta.
Kannada	: Vishnukake.
Malayalam	: Vishnukranti.
Hindi	: Vishnukranta.

This consists of the whole herb of *Evolvulus alsinoides* Linn. of the Convolvulaceae. It is bitter, tonic, febrifuge and vermifuge. Smoked in asthma and bronchitis. Contains an alkaloid.

185. FALCATE TRUMPET FLOWER :

Sanskrit	: Rishabhaka.
Tamil	: Rishabhaka.
Telugu	: Rishabhaka.
Kannada	: Rishabhaka.
Malayalam	: Rishabhaka.

The fruits of this tree resemble falcate horns. This is tentatively referred to Rishabhaka, which is one of the eight drugs that are referred to as Ashtavarga. Please see 'Eight drugs'. The tree is botanically known as *Dolichandrone falcata* Seem. of the Bignoniaceae. Contains tannin.

186. FALSE CALUMBA STEM :

Please see 'Ceylon calumba stem'.

187. FALSE PAREIRA BRAVA :

Sanskrit	: Patha.
Tamil	: Appatta, Paadakkizhangu.
Telugu	: Padha.
Malayalam	: Kaattuvalli.
Hindi	: Padh.

This consists of the tuberous roots of *Cissampelos pareira* Linn. of the Menispermaceae. The drug is bitter, antiperiodic, diuretic and purgative. Used in dys-

pepsia, dropsy, coughs and cystitis. Contains alkaloids cissampeline, bebeerine, sepeerine, hyatin and hyatinin, and a sterol, alongwith quercitol and some saponins. Hyatin methiodide and methochloride possess almost equal degree of curariform activity as that of d-tubocurarine.

188. FENNEL SEEDS :

Sanskrit	: Stoolajeeraka.
Tamil	: Sombu.
Telugu	: Peddajilakara.
Malayalam	: Vaayukattam, Perunjirakam.
Kannada	: Dodda sompu.
Hindi	: Sownf.

This consists of the cremocarpic fruits of *Foeniculum vulgare* Miller of the Umbelliferae. It is an agreeable aromatic and carminative. In overdoses it is emmenagogue. Best varieties contain essential oil upto 5%. The principal constituents of this oil are anethol upto 60% and fenchone upto 20%. The fruits also contain about 20% proteins and 12 to 18% of fixed oil.

189. FENUGREEK :

Sanskrit	: Methika.
Tamil	: Vendayam.
Telugu	: Mentulu.
Malayalam	: Vendayam, Uluva.
Kannada	: Menthya.
Hindi	: Methi.

This consists of the seeds of *Trigonella foenum-graecum* Linn. of the Leguminosae. The drug is carmi-

native, tonic, aphrodisiac, antidysenteric and refrigerent. Contains about 28% of mucilage, 22% of proteins and 6% of fixed oil. The mucilage on hydrolysis yields sugars mannose and galactose. Two alkaloids, trigonelline and choline are present. Saponin and nicotinic acid are also recorded.

190. FIELD BIND WEED :

Sanskrit	: Prasarini.
Tamil	: Mudiyaakkondal.
Telugu	: Gonte magoru chettu.
Kannada	: Hesarane.
Malayalam	: Talaneeli.
Hindi	: Pasaran.

Consists of the complete plant of *Merremia tridentata* Hallier f. of the Convolvulaceae. It is tonic and laxative. Used in the treatment of rheumatism, piles and urinary disorders.

191. FIELD PEA :

Sanskrit	: Vatana.
Tamil	: Pattani.
Telegu	: Patanlu.
Kannada	: Bataani.
Hindi	: Matar.

This consists of the seeds of *Pisum sativum* Linn. of Leguminosa. Seeds emollient and resolvent. Contains alkaloid trigonelline that is present also in fenugreek. The seed oil antagonises the effect of male sex hormone and causes sterility.

192. FIG TREE :

Please see 'Common fig'.

193. **FIRE FLAME FLOWERS :**

Sanskrit	: Dhataki pushpa.
Tamil	: Kaattaaththippoo.
Telugu	: Dhataki puda.
Kannada	: Dhai huvvu.
Malayalam	: Taatire.
Hindi	: Dhai ka phool.

This consists of the flowers of **Woodfordia fruticosa** Kurz. of the Lythraceae. The drug is astringent. Used in dysentery, menorrhagia, derangement of the liver, inflammations and haemorrhoids. Considered as a safe stimulant in pregnancy. Contains a gum, tannin and dye.

194. **FISH :**

Sanskrit	: Matsya.
Tamil	: Meen.
Telugu	: Matsya.
Kannada	: Matsya.
Malayalam	: Meen.
Hindi	: Machli.

The term comprises of all the bony fishes. The bile is medicinal.

192. **FIVE ROOTS:**

Sanskrit	: Panchamoola.
Tamil	: Panchamoolam.

This comprises of two categories, laghupanchamoola and mahapanchamoola, which are equivalent to lesser five roots and larger five roots.

The lesser five roots are :

1. Roots of Unifoliate tick trefoil
Desmodium gangeticum DC.
2. Roots of Sweet smelling hare foot
Uraria lagopoides DC.
3. Roots of Indian night shade
Solanum indicum Linn.
4. Roots of Jacquins night shade
Solanum xanthocarpum Schrad & Wendl.
5. Roots of Small caltrops
Tribulus terrestris Linn.

The larger five roots are :

1. Bael roots
Aegle marmelos Corr.
2. Premna roots
Permana integrifolia Linn.
3. Indian trumpet flower roots
Oroxylum indicum Vent.
4. Kashmere tree root
Gmelina arborea Linn.
5. Roots of yellow flowered fragrant trumpet flower
Stereospermum chelnoides DC.

196. FIVE SALTS :

Sanskrit : Panchalavana.
Tamil : Panchalavanam.

This consists of five types of salts, two of which are highly artificial in nature.

- | | |
|----------------|------------------|
| 1. Rock salt | Sodium chloride. |
| 2. Common salt | Sodium chloride. |
| 3. Sochal salt | (Artificial) |
| 4. Black salt | („) |
| 5. Glass salt | („) |

For notes on 3, 4 and 5 please see Vit salt, Sochal salt and Glass salt respectively.

197. FIVE SPICES :

Sanskrit : Panchakola.

This consists of the following five drugs.

1. Long pepper.
2. Long pepper roots.
3. Lead wort roots.
4. Dry ginger.
5. Black pepper roots.

198. FIVE WATER LILIES :

Water lilies produce white and colored flowers. Blue, rose, red and yellow varieties are available besides the common white variety. The rhizomes are used.

199. FOUR AROMATICS :

Sanskrit	: Chaturjataka.
Tamil	: Chaturjataka
Telugu	: Chaturjataka.
Kannada	: Chaturjataka.
Malayalam	: Chaturjataka.
Hindi	: Chaturjataka.

This consists of the following four aromatic drugs :

1. Cinnamom bark.
2. Cinnamon leaves.
3. Cardamoms.
4. Nagkeshar stamens.

200. FOUR FICUS BARKS :

Sanskrit	: Chaturksheeri vriksha.
Tamil	: Nalpalamaram.
Telugu	: Nalpalamaram.
Kannada	: Nalpalamaram.
Malayalam	: Nalpalamaram.
Hindi	: Nalpalamaram.

This consists of the following four drugs derived from species of *Ficus*.

1. Banyan bark — *Ficus bengalensis* Linn.
2. Peepal bark — *Ficus religiosa* Linn.
3. Wild fig bark — *Ficus racemosa* Linn.
4. Shining leaved fig bark — *Ficus retusa* Linn.

201. FRAGRANT SCREW PINE :

Sanskrit	: Ketaka.
Tamil	: Thaazhai.
Telugu	: Mogali.
Kannada	: Kedige, Kedage.
Malayalam	: Kaitha, Pokkaitha.
Hindi	: Keora, Kivda.

The leaves ensheathing the inflorescence in *Pandanus tectorius* Soland. of the Pandanaceae are highly scented. Used as stimulant and antispasmodic. Also

used in small pox and skin diseases. Contains essential oil with methyl ether of beta phenylethyl alcohol, benzyl benzoate, benzyl salicylate, benzyl acetate, geraniol, guaiacol and aldehydes.

202. FRAGRANT STICKY MALLOW :

Sanskrit	: Latakasoori.
Tamil	: Kastoori Vendai.
Telugu	: Kastoori Venda.
Kannada	: Bilarakkasi gida.
Malayalam	: Latakastoori.
Hindi	: Latakastoori.

This is **Pavonia odorata** Willd. of the Malvaceae. Sometimes the Sanskrit name 'Hreebera' is attributed to this plant. The root is astringent, tonic, demulcent and febrifuge. Used also in rheumatism. Contains mucilage.

203. FRENCH HONEY-SUCKLE TUBERS :

Sanskrit	: Bhumikushmanda.
Tamil	: Nilappoosani.
Telugu	: Daarigummadi.
Kannada	: Nela kumbala.
Malayalam	: Mudukkan kizangu.
Hindi	: Bilayi kand.

This consists of the tubers of **Pueraria tuberosa** DC. of the Leguminosae. It is demulcent, refrigerent, tonic and lactagogue.

204. FRESH GINGER :

Sanskrit	: Ardraka.
Tamil	: Inchi.
Telugu	: Ardrakamu, Allam.
Kannada	: Alla.
Malayalam	: Inji.
Hindi	: Adrak.

This consists of the fresh rhizomes of **Zingiber officinale** Rosc. of the Zingiberaceae. Please see 'Dry ginger' also.

205. FRUITS OF ROXBURGH'S TREE OF BEAUTY:

Sanskrit	: Priyangu.
Tamil	: Gnaazhal.
Telugu	: Erra aduga, Prenkhanam.
Kannada	: Nerpilagu.
Malayalam	: Gnaazhal.
Hindi	: Priyangu.

This consists of the fruits of **Aglaia roxburghiana** Miq. of the Meliaceae. The drug is astringent and cooling. Used in inflammations and leprosy.

206. GALENA :

Sanskrit	: Anjana.
Tamil	: Anjanakkal, Neelanjanam.
Telugu	: Neelanjanan.
Kannada	: Neelanjana.
Malayalam	: Anjanakkallu.
Hindi	: Surma.

This is also called as Black antimony. It is antimony sulfide. Used as collyrium in impaired eye sight, ophthalmia, cataract, redness and irritation of the eyes.

207. GALL BLADDER :

Sanskrit	: Pitta.
Tamil	: Piththam.
Telugu	: Piththam.
Kannada	: Piththam.
Malayalam	: Piththam.
Hindi	: Piththam.

Wherever gall bladder is mentioned, the bladder along with its contents is meant. Gall bladders of several animals are used in medicine.

208. GALLS :

Sanskrit	: Karkatakasringi.
Tamil	: Karkadagasirungi.
Telugu	: Karkadagasirungi.
Kannada	: Karkadagasirungi.
Malayalam	: Karkadagasirungi.
Hindi	: Kakdaseeng.

These are also called as Chinese or Japanese galls. Please see — Chinese galls.

209. GAMBIER :

Sanskrit	: Khadir Sara.
Tamil	: Kaththakkaambu.
Telugu	: Kacha.
Kannada	: Katha.
Malayalam	: Katha.
Hindi	: Katha.

This consists of the dried aqueous extract prepared from the leaves and twigs of **Uncaria gambir** Roxb. of the Rubiaceae. The drug occurs in the market as pale brown, short cylindric lumps, very light in weight. It is astringent and is used to check diarrhoea. It contains catechu tannic acid and catechin.

210. GARDEN PEA :

Sanskrit	: Kalaya.
Tamil	: Pattaani.
Telugu	: Battani.
Kannada	: Vattakadale.
Malayalam	: Malankadala.
Hindi	: Matar.

Please see — 'Field pea'.

211. GARDEN RUE :

Sanskrit	: Satap.
Tamil	: Arvada.
Telugu	: Sadapa.
Kannada	: Arvada.
Malayalam	: Aruvada.
Hindi	: Satap.

This is the herb of **Ruta graveolens** Linn. of the family Rutaceae. It is stimulant, antispasmodic, emmenagogue, irritant and abortifacient. Used in the treatment of rheumatism, hysteria, worms, colic and atonic amenorrhoea and menorrhagia. Contains glucoside Butin, and essential oil. Rutin is well known in restoring capillary fragility to normal and preventing capillary haemorrhage.

212. GARLIC :

Sanskrit	: Lasunam
Tamil	: Ullippoondu, Vellaippoondu.
Telugu	: Vellulli.
Kannada	: Bellulli.
Malayalam	: Vellulli.
Hindi	: Lahsun.

Consists of the bulbs of **Allium sativum** Linn. of Amaryllidaceae. The drug is expectorant, carminative and stimulant. Used in intermittent fevers, coughs, atonic dyspepsia, flatulence, colic and skin diseases. Contains an essential oil with allyl propyl disulfide, diallyl disulfide, two more sulfur compounds, allicin, allisatin 1 & 2, and antiseptic and hypotensive principles.

213. GHEE :

Sanskrit	: Ghrita.
Tamil	: Nei.
Telugu	: Neiee.
Kannada	: Tuppu.
Malayalam	: Nei.
Hindi	: Ghee.

In Ayurveda, only cow's ghee is used. Rancid ghee should be rejected.

214. GINGER : (Dried)

Sanskrit	: Sunti, Ardraka.
Tamil	: Chukku, Inchi.
Telugu	: Sonthi.
Kannada	: Sunthi.
Malayalam	: Chukku.
Hindi	: Sont.

Ginger is used in medicine either fresh or dry. It consists of the rhizomes of **Zingiber officinale** Rose. of the Zingiberaceae. Please see — 'Dry ginger'.

215. GLORIOSA :

Sanskrit	: Longali.
Tamil	: Kalappankizhangu.
Telugu	: Pothidumpa.
Kannada	: Nangulika, Radagari.
Malayalam	: Ventoni, Mentonikkizanga.
Hindi	: Kalihari.

Please see — 'Glory lily'.

216. GLORY LILY :

Sanskrit	: Longali.
Tamil	: Kalappankizhangu.
Telugu	: Pothidumpe.
Kannada	: Karadikannira Gadde : Nangulika, Radagari.
Malayalam	: Ventoni, Mentonikhizangu.
Hindi	: Katihari.

Glory lily is **Gloriosa superba** Linn. of the Liliaceae. The tuberous roots are medicinal. Also called as the Malabar glory lily. The drug is poisonous, purgative, cholagogue, anthelmintic and antibiotic. Used in leprosy, skin diseases, piles, colic and worms. Contains alkaloids gloriosine, superbine, colchicine etc.

217. GOAT :

Sanskrit	: Aja.
Tamil	: Aadu, Vellaadu.
Telugu	: Meka.

Kannada	: Atu.
Malayalam	: Aadu, Kolaadu.
Hindi	: Bakri.

This is the domesticated goat, *Capra agagrus* Linn. Its flesh, milk, gall bladder, urine and horns are medicinal. The flesh is cardiac and stimulant. Milk is cooling and astringent. Urine is ammoniacal and useful in asthma and epilepsy.

216. GOLD :

Sanskrit	: Swarna.
Tamil	: Pon, Thangam.
Telugu	: Banganam.
Kannada	: Swarna.
Malayalam	: Pon.
Hindi	: Sona.

Metallic gold in free elemental state (Au) is a poison when ingested. A calx of gold is medicinal. Preparations containing gold are considered as nervine tonic, aphrodisiac, alterative and emmenagogue. When given in poisonous overdoses, causes gastro enteritis and convulsive cramps. Gold in colloidal dimensions is a reputed remedy in lumbago.

219. GRAM :

There are a number of pulses that are named with a suffix — gram.

1. Bengal gram is *Cicer arietinum* Linn.
2. Black gram is *Phaseolus mungo* Linn.
3. Green gram is *Phaseolus aureus* Roxb.

4. Horse gram is **Dolichos biflorus** Linn.
5. Red gram is **Cajanus cajan** Millsp.
6. Dew gram is **Phaseolus aconitifolius** Jacq.

Please see — Bengal gram, black gram etc.

220. **GREEN VITREOL :**

Sanskrit	: Kaseesa.
Tamil	: Annabedi.
Telugu	: Annabhedi.
Kannada	: Kasisa.
Malayalam	: Turusi.
Hindi	: Hara tutia.

Green vitreol is ferrous sulfate. The drug is haematinic, emmenagogue, antiperiodic, anthelmintic and disinfectant. In larger doses it is poisonous. It is used in anaemia, chlorosis, amenorrhoea, leucorrhoea and enlarged spleen. It precipitates the proteids as a disinfectant.

221. **GUM ACACIA :**

Please see — Gum arabic.

222. **GUM ARABIC :**

Sanskrit	: Babboola niryasa.
Tamil	: Velampisin.
Telugu	: Nalla tumma.
Kannada	: Karijali.
Malayalam	: Karuvelam pasa.
Hindi	: Kala-babul ka gond.

This consists of the gum obtained from **Acacia arabica** Willd. of the Leguminosae. It is useful in checking diarrhoea and dysentery. Also used in irritable states of the urino-genital organs. It contains mucilage, arabic acid, calcium, magnesium, potassium, malic acid and sugar.

222A. GUM ARABIC BARK :

Sanskrit : Babboola twak.
Tamil : Karuvelam pattai.
Malayalam : Karuvelam pattai.

This consists of the bark of Gum arabic tree, **Acacia arabica** Willd. It is astringent because of its tannin content.

223. GUM OF SILK COTTON TREE :

Sanskrit : Salmali Nirryasa.
Tamil : Ielavampisin.
Telugu : Mundla buruga.
Kannada : Ielavada mara.
Malayalam : Ielavam pisin.
Hindi : Semal.

This consists of the gum of **Bombax malabaricum** DC. of the Bombacaceae. The tree is also known as **Salmalia malabarica** Schott & Endl. The drug is astringent, haemostatic and tonic. Used in the treatment of dysentery, diarrhoea and menorrhagia. It contains catechutannic acid.

224. GYPSUM :

Please see 'White Asphalt'.

225. HENBANE NIGER :

Please see — Henbane seeds.

226. HENBANE SEEDS :

Sanskrit	: Yavanika, Parasikayavani.
Tamil	: Paaraseeka yavani.
Telugu	: Kurasani omamu.
Kannada	: Kurasani.
Malayalam	: Kurasani.
Hindi	: Khulsani ajwain.

This consists of the seeds of *Hyoscyamus niger* Linn. of the family Solanaceae. The drug is narcotic, sedative, anodyne, antispasmodic, mydriatic and useful in asthma and whooping cough. Employed in irritable conditions and nervous affections. Contains about 0.05 per cent of total alkaloid, consisting of hyoscyamine and scopolamine, and also fixed oil up to 20%.

227. HIMALAYAN CEDAR WOOD :

Sanskrit	: Devadaru.
Tamil	: Devadaaru.
Telugu	: Devadaaram.
Kannada	: Devadaari mara.
Malayalam	: Devataru.
Hindi	: Deodar.

This consists of the wood of *Cedrus deodora* Loud. of the Coniferae. The wood is aromatic. It is diaphoretic, diuretic, carminative and astringent. It is useful in fevers, flatulence, pulmonary and urinary disorders, rheumatism, piles, urinary calculi and dysentery. The wood contains gum, cholestrin and essential oil with a balsamic odor.

228. HIMALAYAN CHERRY WOOD :

Sanskrit	: Padmakashta.
Tamil	: Paḍimukam.
Telugu	: Padmapu chettu.
Kannada	: Padmaka.
Malayalam	: Padumugam.
Hindi	: Padmaak.

This consists of the wood of **Prunus cerasoides** D. Don of the Rosaceae. It is considered refrigerent and lithon-
triptic. Contains amygdalin and hydrocyanic acid.

229. HIMALAYAN SILVER BIRCH LEAVES :

Sanskrit	: Bhurjapatra.
Tamil	: Boorjapattiram.
Telugu	: Boorjapattiram.
Kannada	: Bhujpatra.
Malayalam	: Boorjapattiram.
Hindi	: Bhujpatra.

This consists of the leaves of **Betula utilis** D. Don of the Betulaceae. It is antiseptic and carminative. It contains betulin and essential oil.

230. HIMALAYAN SILVER FIR LEAVES :

Sanskrit	: Taleesapatra.
Tamil	: Talisapatri.
Telugu	: Talisapatri.
Kannada	: Talisapatri.
Malayalam	: Talisapatri.
Hindi	: Talispatra.

This consists of the leaves of **Taxus baccata** Linn. of the Taxaceae. The drug is aromatic. It is used as a stimulant and decongestant of the respiratory system. Contains alkaloids taxine and ephedrine, and essential oil. Also used as a cardiac depressent.

231. **HIRVI :**

Sanskrit : Hirvi.
Tamil : Iruvi.

This consists of the rhizome of some fern, comparable to the Male fern rhizome. The male fern botanically is **Dryopteris filix-mas** Schott. of the Polypodiaceae. The drug is a deputed taenicide, repelling and killing the tape worms. It contains the poison filmerone.

232. **HONEY :**

Sanskrit : Madhu.
Tamil : Thayn.
Telugu : Thayne.
Kannada : Jenutuppa.
Malayalam : Thayn.
Hindi : Madhu.

Honey is the saccharine fluid made by the bee, **Apis mellifera** Linn, from the nectar of flowers. The fluidity and color are variable. At lower temperatures honey forms dextrose crystals which settle down. From a study of the pollen, the source of honey could be determined. Honey is nutritive, demulcent and preservative. Pure honey should show at most a slight turbidity when mixed with three or four volumes of alcohol indicating the absence of dextrin, which is a frequent constituent

of commercial glucose and of honey made from honey dew. Hydrochloric and sulphuric acids are commonly used for the manufacture of commercial glucose and invert sugar and there should not be more than very small traces present in honey. The presence of invert sugar may also be detected by applying to the ether-extract of the honey the test for derivatives of furfuraldehyde, the reagent used being a 1% solution of resorcinol in hydrochloric acid (sp. gravity 1.16). This reagent gives a persistent deep cherryred color with the traces of furfuraldehyde compounds occurring in the artificial invert sugar.

233. HORSE :

Sanskrit	: Ashwa.
Tamil	: Kudirai.
Telugu	: Gurram.
Kannada	: Kudirae.
Malayalam	: Kudira.
Hindi	: Ghoda.

This is the domesticated horse — **Equus caballus** Linn. Its milk is stimulant. Urine is bitter, stimulant, stomachic and laxative. Used also in ring worm and as anthelmintic. Its bile is also medicinal.

234. HORSE GRAM :

Sanskrit	: Kulatha.
Tamil	: Kollu, Kaanam.
Telugu	: Bulavulu.
Kannada	: Hluvale.
Malayalam	: Muthira.
Hindi	: Kulthi.

This consists of the seeds of **Dolichos biflorus** Linn. of the Leguminosae. The seeds are diuretic and tonic. Also astringent. The decoction is used in leucorrhoea and menstrual disorders. Seeds are rich in urease.

235. HUMAN BREAST MILK :

Sanskrit	: Stanya.
Tamil	: Mulaippaal, Thaippaal.
Telugu	: Stanya.
Kannada	: Hengusina haalu.
Malayalam	: Mulappaalu.
Hindi	: Stree ka dud.

The milk from the females of the human species is meant. It is refrigerent, nutritive and lighter than milk from lower mammals.

236. INDIAN ALOES :

Please see — 'Aloes'.

237. INDIAN ATIS :

Please see — 'Atis or Atees'.

238. INDIAN BEECH TREE :

Sanskrit	: Kararnja.
Tamil	: Pungan.
Telugu	: Kanuga chettu.
Kannada	: Hongae.
Malayalam	: Pungan.
Hindi	: Karanjwa.

This is **Pongamia pinnata** Pierre. a tree belonging to the family Leguminosae. Also called as the honge oil tree. All parts of the plant are medicinal. They possess vermifugal, insecticidal and bactericidal properties and are hence much used in skin diseases. Seeds contain 27 to 36% of fatty oil with traces of essential oil. Contains three crystalline substances, karanjin, pongamol and glabrin, the first of which is responsible for the curative action of the oil.

239. INDIAN DILL SEEDS :

Please see — 'Dill seeds'.

240. INDIAN GLOBE FLOWER :

Sanskrit	: Hapusha.
Tamil	: Kottaikkarandai.
Telugu	: Maratitigae.
Malayalam	: Adakkamanian.
Kannada	: Karandae.
Hindi	: Gorak mundi.

Consists of the herb of **Sphaeranthus indicus** Linn. of the Compositae. The drug is aromatic and cooling. The decoction is diuretic. Contains essential oil and alkaloid sphaeranthine.

241. INDIAN HEMP :

Sanskrit	: Bhangā.
Tamil	: Kanja.
Telugu	: Ganjaye.
Malayalam	: Kanjavu.
Kannada	: Bhangi.
Hindi	: Bhang.

This consists of the dried flowering tops of pistillate plants of **Cannabis sativa** Linn. of the Cannabinaceae, cultivated in tropical India. The drug acts on the nervous system, producing first excitement accompanied by hallucinations and afterwards lethargy and sleep. In small doses, it is used as sedative in mania and hysterics, as well as spasmodic cough, asthma, neuralgia etc. Heavy doses cause cardiac failure and death. The therapeutic value of the drug lies in the resin, some times called cannabinone, which is a mixture of cannabinol (1 hydroxy 3-n-amyl, 6, 6, 9 trimethyl-6-dibenzopyran) and a number of isomeric tetrahydrocannabinols.

242. INDIAN MADDER :

Sanskrit	: Manjishta.
Tamil	: Manchitti.
Telugu	: Manjishta tige.
Kannada	: Manjishta.
Malayalam	: Manjatti, poovathu
Hindi	: Manjit.

This consists of the roots of **Rubia cordifolia** Linn of the Rubiaceae. The drug is tonic, alterative and astringent. It contains glucoside manjishtin. Formerly source of a red dye.

243. INDIAN NIGHT SHADE :

Sanskrit	: Brihati.
Tamil	: Mullkatri.
Telugu	: Peddamulanga.
Kannada	: Heggulu.
Malayalam	: Cheruvazhutuna.
Hindi	: Kataye.

This is **Solanum indicum** Linn of the Solanaceae. The roots are employed in medicine. The drug is carminative and expectorant and is used in coughs, congestion of chest due to asthma or tuberculosis. Also useful in fevers, dysuria and inchuria. Contains alkaloids solanine and solanidine.

244. INDIAN OLIBANUM :

Sanskrit	: Devadhoopa.
Tamil	: Parangisaambiraani.
Telugu	: Parangisaambiraani.
Kannada	: Parangisaambiraani.
Malayalam	: Parangisaambiraani.
Hindi	: Devadhoopa.

This is an aromatic gum resin obtained from **Boswellia** species. The drug is diaphoretic, diuretic, emmenagogue, astringent and antibiotic. Used in skin affections and rheumatism. Contains boswellic acid, olibanoresene, arabic acid with calcium and magnesium, bassorin, bitter principle and essential oil with pinene, dipentene and phellandrene.

245. INDIAN PENNY WORT :

Sanskrit	: Mandookaparni.
Tamil	: Vallarai.
Telugu	: Saraswataku.
Kannada	: Vondelagi.
Malayalam	: Brahmi,
Hindi	: Brahmi.

This consists of the herb of **Centella asiatica** Urban. of the Umbelliferae. It is alterative and tonic in dermal

and nerve diseases. Reputed to promote good memory. Contains asiaticoside, essential oil, fatty oil, sitosterol, tannin, resin, alkaloid hydrocotylin and antiscorbutic acid. Asiaticoside shown to be useful in treating leprosy. The bitter principle is vallarine. Pectic acid is also present.

246. INDIAN SARSAPARILLA :

Sanskrit	: Sariba.
Tamil	: Nannaari.
Telugu	: Sugandapaala.
Kannada	: Sariva.
Malayalam	: Narunendi kilangu.
Hindi	: Anantamul.

This consists of the roots of **Hemidesmus indicus** Schult. of the Asclepiadaceae. The drug is used as a blood purifier, appetiser and diuretic. It is used in syphilis, rheumatism and leucorrhoea, and also skin diseases. The roots contain essential oil with 2-hydroxy-4-methoxy benzaldehyde, sterols and a glucoside. Also contains saponin, resin acid and tannins.

The drug is sometimes given the Sanskrit name 'Swetasariba'. The roots of **Ichnocarpus frutescens** R.Br. of the Apocynaceae are given the name 'Krishnasariba' and these are recognised as white and black sarasprilla by many writers of Indian materia medica.

247. INDIAN SPIKE NARD :

Sanskrit	: Jatamansi.
Tamil	: Sadamanchil.
Telugu	: Jatamamsi.

Kannada : Jatamamsi.

Malayalam : Manji.

Hindi : Jatamamsi.

This consists of the roots of *Nardostachys jatamansi* DC. of the Valerianaceae. The drug is bitter, aromatic, tonic, stimulant, antispasmodic and antibacterial. It is employed in the treatment of epilepsy, hysteria and convulsive affections. Also used in palpitation of heart, and intestinal colic. It contains essential oil and a crystalline acid, jatamansic acid.

248. INDIAN TRUMPET FLOWER BARK :

Sanskrit : Syonaka.

Tamil : Peruvaagai.

Telugu : Peddamanuga.

Kannada : Sonaepatti.

Malayalam : Palakappayyani.

Hindi : Sonapata.

This is the bark of *Oroxylum indicum* Vent. of the Bignoniaceae. It is tonic, astringent and diaphoretic. Used also in rheumatism. Contains bitter substance oroxylum, alkaloid, glucoside and baicalein.

249. INDIAN VALERIAN :

Sanskrit : Tagara.

Tamil : Tagaram.

Telugu : Tagara.

Kannada : Tagara.

Malayalam : Tagara.

Hindi : Tagara.

The drug consists of the roots and rhizomes of **Valeriana wallichii** DC. of the Valerianaceae. It is stimulant, carminative, antispasmodic and aromatic. Used in hysteria, epilepsy, chorea, neurosis and palpitation of heart. Contains essential oil and water soluble physiologically active principles.

250. INDIAN WALNUT :

Sanskrit	: Akshota.
Tamil	: Naattu akrothu.
Telugu	: Naattu akrothu.
Kannada	: Akota.
Malayalam	: Malyayuka maram.
Hindi	: Akrot.

This consists of the nuts of **Aleurites moluccana** Willd. of the Euphorbiaceae. The seed kernels are used as purgative. Contains a fixed oil.

251. INDIGO PLANT :

Sanskrit	: Neeli.
Tamil	: Avuri.
Telugu	: Neeli chettu.
Kannada	: Neeli.
Malayalam	: Amari.
Hindi	: Neeli.

This is **Indigofera tinctoria** Linn. of the Leguminosae. The leaves and roots are medicinal. Considered as cooling in property. Given in epilepsy, nervous disorders, sores, ulcers and haemorrhoids and also in hepatitis. Contains glucoside indican.

252. IPOMOEA DIGITATA :

Sanskrit	: Ksheeravidaari.
Tamil	: Paalmudukkan.
Telugu	: Mattamala tige.
Kannada	: Ksheera kanda.
Malayalam	: Paalmudukku.
Hindi	: Bilaikand.

The tuberous roots of *Ipomoea digitata* Linn. of the Convolvulaceae are tonic, demulcent, lactagogue, cholagogue, laxative and aphrodisiac. Contains resin similar to jalap resin.

253. IPOMOEA SEPIARIA :

Sanskrit	: Lakshmana.
Tamil	: Thaalikkeerai.
Telugu	: Laxmane.
Kannada	: Purushagadde.
Malayalam	: Tirutaali.
Hindi	: Laxman.

Ipomoea sepiaria Kcen. is a twiner of the Convolvulaceae. The plant is deobstruent and diuretic. Considered useful as antidote in arsenic poisoning.

254. IRON :

Sanskrit	: Loha.
Tamil	: Irerumbu.
Telugu	: Ienumu.
Kannada	: Kabbina.
Malayalam	: Irembu.
Hindi	: Lahua.

Compounds of iron are useful in anaemia. Iron in free metallic state is not prescribed. It is either calcined or is allowed to react with juices and decoctions and then the calx or the liquid obtained is used as medicine. Iron compounds are astringent and cause constipation. Anaemic patients who are taking medicines containing iron, should not take vinegar as vinegar prevents absorption of iron.

255. **IVORY :**

Sanskrit	: Gaja danta.
Tamil	: Aanaiththandan.
Hindi	: Hathidant.

Ivory is usually obtained from the teeth of elephants. It promotes growth of hair.

256. **JAGGERY :**

Sanskrit	: Guda.
Tamil	: Vellam.
Telugu	: Vellamu.
Kannada	: Bella, Vella.
Malayalam	: Sarkara.
Hindi	: Gud.

Unless otherwise specified, sugarcane jaggery should be used. Jaggery that is aged in storage and devoid of any saltish taste is recommended. Jaggery contains some amount of yeasts that bring about alcoholic fermentation when a solution of jaggery is made to stand for a few days.

257. JAQUIN'S NIGHT SHADE :

Sanskrit	: Kantakari.
Tamil	: Kandankattiri.
Telugu	: Revatimulanga, vrakutichettu.
Kannada	: Nellagullu.
Malayalam	: Kantakari chunda.
Hindi	: Chiti kateri.

This is *Solanum xanthocarpum* Schrad. & Wendl. of the Solanaceae. The plant is useful in cough, asthma, gonorrhoea and rheumatism. Fruits yield carpesteral, glucoalkaloid solanocarpine and solanine-S.

258. JASMINE :

Sanskrit	: Jati.
Tamil	: Malli.
Telugu	: Malli.
Kannada	: Mallige.
Malayalam	: Malathi.
Hindi	: Chameli.

This is *Jasminum officinale* Linn. of the Oleaceae. Leaf juice used in otorrhoea. Flowers in skin diseases and head ache. Also anthelmintic, diuretic and emmenagogue. Leaves contain alkaloid and salicylic acid. Flowers contain an essential oil.

259. JATAMANSI :

Please see—Indian spike nard.

260. JEEVAKA :

This is the Sanskrit name of a drug belonging to the eight drugs. Please see—Eight drug group.

261. **JESSAMIN :**

Please see Orange jessamine.

262.. **JOWAR KANJI or JOWAR GRUEL :**

Gruel prepared from *Sorghum vulgare* Pers. pearl millet.

263. **JUJUBE :**

Sanskrit	: Badari.
Tamil	: Yelandai.
Telugu	: Regu.
Kannada	: Boral.
Malayalam	: Elanda.
Hindi	: Baer.

This is *Zizyphus jujuba* Lam. of the Rhamnaceae. The fruits are cooling, mucilagenous, appetizer, styptic and pectoral.

264. **KAKOLI :**

Please see—Eight drugs.

265. **KAMELA :**

Sanskrit	: Kampilla.
Tamil	: Kapila.
Telugu	: Kapila, Sundari vasanta.
Kannada	: Kampillakam.
Malayalam	: Kamlippala.
Hindi	: Kamela.

This consists of the reddish glandular hairs of *Mal-lotus philippinensis* Muell-Arg. of the family Euphorbia-

ceae. These glands are found only on the fruits. The drug is styptic and anthelmintic. It is an efficacious remedy for tape worm infection, expelling the worm and producing free purgation. Contains Rottlerin (mallotoxin) and isorottlerin. Rottlerin is a derivative of phloroglucin. Contains also resinous matter.

266. KANJEE or GRUEL :

Sanskrit : Pega.
Tamil : Kanji.

This is prepared by cooking the drug in water and straining.

267. KANTIVENNA :

This consists of the alimentary excretion of the elephant calf, excreted as soon as it is born.

268. KAPOK TREE-TRUE :

Sanskrit : Sweta salmali.
Tamil : Ielavam.
Telugu : Tellaburuga.
Kannada : Ielavu.
Malayalam : Mullilavu.
Hindi : Kapas.

This is *Ceiba pentandra* Gaertn. of the Bombacaceae. The leaves are emollient. Root diuretic. Gum is tonic, alterative and astringent and in sufficient doses laxative. Seeds contain fixed oil.

269. KASHMARI TREE :

Please see—'Cashmere tree'.

270. KERMES MINERAL :

Please see—'Black antimony'.

271. LAC STICKS :

Sanskrit	: Laksha.
Tamil	: Kombarakku.
Telugu	: Laka.
Kannada	: Aragu.
Malayalam	: Kolarakku.
Hindi	: Lac.

This consists of the twigs of plants covered with the resinous bodies of the lac insects, *Laccifer lacca*. Used in haematemesis. Considered specific application for caries and diseased dentition. It promotes tissue regeneration and healing.

272. LARGE LONG PEPPER :

Sanskrit	: Gajapippali.
Tamil	: Aanaiththippili.
Telugu	: Peddapippalu.
Kannada	: Gaja hippali.
Malayalam	: Aththithippili.
Hindi	: Gaja pipal.

The drug is a larger version of the ordinary long pepper. The material is supposed to have been derived from *Scindapsus officinalis* of the Araceae. It is certainly not the male inflorescence of the palmyrah palm as written in some books. Reported to contain an alkaloid.

273. LARGER CARDAMOMS :

Please see 'Cardamoms'.

274. LATEX OF CALOTROPIS :

Sanskrit	: Arkaksheera.
Tamil	: Yerukkam paal.
Telugu	: Jilledu.
Kannada	: Yekka haalu.
Malayalam	: Yerikkinpal.
Hindi	: Ak ka dud.

This consists of the milky exudate from **Calotropis gigantea** Linn. of the Asclepiadaceae. It is irritant, emetic and purgative. Contains uscharin, calotoxin, calactin, alpha calotropeol, beta calotropeol, beta amyrin, calcium oxalate, gigantol, glutathione, a proteoclastic enzyme, and starch.

275. LEAD :

Sanskrit	: Naga.
Tamil	: Kaareeyam.
Telugu	: Nalla Seesamu.
Kannada	: Naga, Seesa.
Malayalam	: Kaareeyam.
Hindi	: Seesa.

This is metallic lead. As a calx, it is used as an astringent, diuretic and anthelmintic. Generally used in urinary disorders. Over doses are poisonous.

276. LEAD WORT ROOT :

Sanskrit	: Chitramoola.
Tamil	: Senkodiveli Ver.

Telugu	: Errachitramoolamu.
Kannada	: Kempachitramoola.
Malayalam	: Cuvannakodiveli moolam.
Hindi	: Lalchita.

This consists of the roots of **Plumbago indica** Linn. of the Plumbaginaceae. The drug is acrid, vesicant and stimulant. Used in rheumatism and paralysis. It is a powerful sialagogue and a remedy for secondary syphilis and leprosy. Contains plumbagin and sitosterol glucoside.

277. LEMON JUICE :

Please see—'Lime juice'.

278. LEPTADENIA RETICULATA :

Sanskrit	: Jivanti.
Tamil	: Keeraippaalai.
Telugu	: Palatige.
Kannada	: Haale.
Malayalam	: Adapotiyan.
Hindi	: Jivanti.

This consists of the stems of **Leptadenia reticulata** W & A. of the Asclepiadaceae. The drug is tonic and stimulant with a laxative action. Some times it is known as white turpith in the Indian raw drug trade. Recognized as one of the 'Eight drugs' group.

279. LESSER CARDAMOMS :

Please see 'Cardamom'.

280. LESSER GALANGAL :

Sanskrit	: Rasna.
Tamil	: Chitrarattai.
Telugu	: Sannarastrakam.
Kannada	: Rasagadde.
Malayalam	: Arathal.
Hindi	: Kulinjan.

This consists of the dried rhizomes of **Alpinia officinarum** Hance. of the Zingiberaceae. It is stimulant and carminative. Also expectorant. Useful in coughs, flatulent dyspepsia, colds and sore throat. Contains volatile oil with cineol, and methyl cinnamate, and a pungent oil body. galangol. Also contains kaempferide, galangin and monomethyl ether of galangin.

281. LIME JUICE :

Sanskrit	: Jambeera swarasa.
Tamil	: Elumichchan chaaru.
Telugu	: Nemmarasamu.
Kannada	: Nimbae rasa.
Malayalam	: Cherunaraka neer.
Hindi	: Nimbu ka ras.

This is the juice squeezed from trasversely cut fruits of **Citrus aurantifolia** Swingle. of the Rutaceae. It is refrigerent, appetiser, antiseptic, stomachic and anti-scorbutic. Useful in bilious vomiting and anorexia. Contains citric and antiscorbutic acids.

282. LINSEED :

Sanskrit	: Atasibeeja.
Tamil	: Aalividai.

Telugu	: Avishivittulu.
Kannada	: Alaseebeja.
Malayalam	: Cheruchanam vittu.
Hindi	: Alsi.

This consists of the seeds of **Linum usitatissimum** Linn. of the Linaceae. Used as demulcent. Poultice used in gout and rheumatism. Given internally in irritation of the genito urinary tract and gonorrhoea. Seeds contain HCN glucoside linamarin, 30 to 40% fixed oil, 6% mucilage 25% of proteins along with wax, resin, sugar, and phosphates.

283. LIQUORICE ROOTS :

Sanskrit	: Yashti.
Tamil	: Atimaturam.
Telugu	: Atimaduram.
Kannada	: Atimatura.
Malayalam	: Irattimaduram.
Hindi	: Jathimath.

This consists of the roots of **Glycyrrhiza glabra** of the Leguminosae. It is sweet, tonic, demulcent and laxative. Used in coughs, sore throat, and genito urinary diseases. Finds use also in peptic ulcer.

The drug is imported into India from the USSR, Italy and Spain. Its use in peptic ulcers was recognized when it was found a few years ago that liquorice has a spasmolytic effect on the ventriculus, thus relieving pain and speeding up recovery. In the animal experiments, it lowers intestinal tone and contractility. It is now given great interest because it is reported that it has effects resembling hydrocortisone.

When liquoice is given along with anthraquinone containing drugs for laxative action, liquorice potentiates anthraquinone drugs by sensitizing the intestines.

Good quality liquorice contains 7-8% glycyrrhizin (glycyrrhetic acid alpha diglucuronoside, C-2-beta.) It behaves like a typical saponin. It tastes one hundred and fifty times sweeter than cane sugar (The sweetest substance found in nature is Stevoside, found up to 7% in the leaves of **Stevia reboudiana**. It is non-toxic and three hundred times sweeter than cane sugar.)

284. LITHARGE :

Sanskrit	: Mrudarsringa.
Tamil	: Mirudarsingi.
Telugu	: Mudarsingy.
Kannada	: Mudarsingy.
Malayalam	: Mudarsingy.
Hindi	: Murdasing.

This is monoxide of lead. Also called as massicot. It occurs in pale yellowish lumps with fibrous texture and heaviness of lead. It is a powerful local astringent and insecticide. Useful also in syphilitic chancres.

285. LODH TREE :

Sanskrit	: Lodhra.
Tamil	: Vethlothram.
Telugu	: Ludduga chakka.
Malayalam	: Pachootri.
Kannada	: Lodha.
Hindi	: Lodh.

This consists of the bark of **Symplocos racemosa** Roxb. of the Symplocaceae. It is cooling astringent and anti-bacterial. Used in bowel complaints, menorrhagia, uterine disorders, and also ulcers. Decoction used as gargle in bleeding gums. Contains alkaloids loturine and col-loturine, chemically related to harmine.

286. LONG PEPPER :

Sanskrit	: Pippali.
Tamil	: Thippili.
Telugu	: Pippili.
Malayalam	: Thippili.
Kannada	: Yippili.
Hindi	: Pippala.

This consists of the fruiting inflorescence of **Piper longum** Linn. of the Piperaceae. It is carminative, alterative, tonic and expectorant. Used in coughs and colds, bronchitis and anorexia. It yields about 1% of volatil oil with 5 to 6.4% of piperine, piperidine and also fatty oil and a pungent resin—**chavicine**.

287. LONG PEPPER ROOTS :

Sanskrit	: Pippalimoola.
Tamil	: Thippiliver.
Telugu	: Modikattiai.
Malayalam	: Pippalimoolam.
Kannada	: Yippilimoola.
Hindi	: Pippalamool.

This consists of the roots of the long pepper plant—**Piper longum** Linn. Properties similar but milder than long pepper.

288. **LOTUS :**

Sanskrit	: Padma, Pundareeka, Kamala.
Tamil	: Taamarai.
Telugu	: Taamara.
Kannada	: Tavare.
Malayalam	: Tamara.
Hindi	: Kamal.

This is *Nelumbo nucifera* Gaertn. of the Nymphaeaceae. All parts of the plant are medicinal. Roots and rhizomes used in piles, dysentery and skin diseases. Flowers are refrigerent and useful in diseases of the liver. Contains alkaloid, nelumbine and nupharine.

289. **LOTUS STAMENS :**

Sanskrit	: Padmakeshara.
Tamli	: Thamarakesaram.
Telugu	: Thamarakesaramulu.
Kannada	: Thamarakesaram.
Malayalam	: Thamarakesaram.
Hindi	: Kamal ka kesar.

This consists of the stamens of *Nelumbo nucifera* Gaertn. The drug is astringent, refrigerent and cardiac tonic.

290. **MACE :**

Sanskrit	: Jatipatri.
Tamil	: Saadippattiri, Jaadippattiri.
Telugu	: Jajipathri.
Kannada	: Jayapatri.
Malayalam	: Jadipatri.
Hindi	: Japatri, Javitri.

This is the arillode around the seed of **Myristica fragrans** Houtt. a tree of the Myristicaceae. It is aromatic, carminative, narcotic, and stomachic. Contains a characteristically odoriferous oil, with myristicine and a large proportion of terpenes.

291. **MADDER :**

Please see—'Indian Madder'.

292. **MADRAS KINO WOOD :**

Sanskrit	: Asana.
Tamil	: Vengai.
Telugu	: Vegesa.
Kannada	: Ollae honnae.
Malayalam	: Vengna.
Hindi	: Peet sola.

This is the heart wood of **Pterocarpus marsupium** Roxb. of the Leguminosae. It is astringent and useful in diarrhoea and dysentery as a decoction. Contains kino tannic acid.

293. **MAHUA TREE :**

Sanskrit	: Madhuka.
Tamil	: Ieluppai.
Telugu	: Ippa.
Kannada	: Ippi.
Malayalam	: Irippa, Iluppa.
Hindi	: Mohi, Mohua.

This is **Madhuca indica** J. F. Gmel. of the Sapotaceae. The flowers are employed as astringent, appeti-

zer, tonic, nutritive and sedative. Useful in piles and chronic bronchitis and worms. Flowers contain sugar. **Madhuca longifolia** Macbride - is also a source.

294. MAIDEN HAIR FERN :

Please see—'Adiantum'.

295. MALABAR TAMARIND :

Sanskrit	: Amlavetasa.
Tamil	: Murgal.
Telugu	: Karukkanpuli.
Kannada	: Muruvana huli.
Malayalam	: Sulampuli, Punampuli.
Hindi	: Amalbed.

This consists of the fruit flesh of **Garcinia indica** Chois. of the Guttiferae. It is antiscorbutic, cooling, cholagogue, emollient and demulcent. It is very sour like tamarind fruit pulp.

296. MANGO :

Sanskrit	: Amra.
Tamil	: Maa.
Telugu	: Maamidi.
Kannada	: Mavinamaramu.
Malayalam	: Maavu.
Hindi	: Aam.

This is **Mangifera indica** Linn. of the Anacardiaceae. The big cotyledons in the fruit stone are astringent and anthelmintic. Useful in haemorrhage, diarrhoea, dysentery and intestinal worms.

297. **MARGOSA :**

Sanskrit	: Nimba.
Tamil	: Vembu.
Telugu	: Yeppa, vepa.
Kannada	: Baevu.
Malayalam	: Veppu.
Hindi	: Neem.

This is *Azadirachta indica* A. Juss. of the Meliaceae. Also called as Neem tree commonly. All parts of the tree are medicinal. In general, these are bitter, tonic, astringent, antiperiodic, antiseptic, anthelmintic and insecticidal. Often used in skin diseases. Seed oil contains margosic acid. All parts contain bitter principles, nimbin, nimbidin and nimbinin. Nimbidin contains sulfur. Flowers contain a sterol - nimbosterol.

298. **MARJORANA :**

Sanskrit	: Maruvaka.
Tamil	: Maruvu.
Telugu	: Marruvam.
Kannada	: Maruva.
Malayalam	: Marikkolundu.
Hindi	: Marva.

This is the whole herb of *Origanum vulgare* Linn. of the Labiatae. Highly scented. An infusion promotes menstrual flow stopped due to cold. It is stimulant. Contains essential oil with thymol.

299. **MARKING NUTS :**

Sanskrit	: Bhallataka.
Tamil	: Seraankottai.

Telugu	: Nalla Jidivittulu.
Kannada	: Kerabija.
Malayalam	: Cherankuru.
Hindi	: Bhilaawa.

These are the nutty fruits of **Semecarpus anacardium** Linn. f. of the Anacardiaceae. The oil in the fruit wall is irritant and powerfully vesicant. The seed kernels are used in rheumatism and leprosy. They are never used alone and are always mitigated before use. Contains anacardic acid, cardol, catechol, anacardol, semecarpol, bhilawanol and fixed oil.

300. MASTICHE :

Sanskrit	: Roomi mastaki.
Tamil	: Roomi mastaki.
Telugu	: Roomi mastaki.
Kannada	: Roomi mastaki.
Malayalam	: Roomi mastaki.
Hindi	: Roomi mastaki.

The resinous exudate from the tree **Pistacia lentiscus** Linn. of the Anacardiaceae constitutes mastiche. It occurs in commerce as small lenticular tears of translucent golden yellow color with a characteristic faint resinous aroma. It is stimulant and diuretic. Contains alpha and beta masticonic acids, alpha and beta masticoresene, alpha and beta masticinic acids, volatile oil and masticolic acid.

301. MERCURIC CHLORIDE :

Sanskrit	: Sowweera.
Tamil	: Veeram.
Telugu	: Sowweera pashanam.

Kannada	:	Sowweera pashanam.
Malayalam	:	Sowweera pashanam.
Hindi	:	Sowweera pashanam.

This is the highly poisonous corrosive sublimate.

302. MERCUROUS SULFIDE (Black) :

Sanskrit	:	Khajjali.
Tamil	:	Khajjali.
Telugu	:	Khajjali.
Kannada	:	Khajjali.
Malayalam	:	Khajjali.
Hindi	:	Khajjali.

This is a fine black impalpable mass prepared by grinding mercury and sulfur.

303. MERCURY :

Sanskrit	:	Rasa, Parada.
Tamil	:	Paadarasam.
Telugu	:	Paadarasam.
Kannada	:	Paadarasam.
Malayalam	:	Paadarasam.
Hindi	:	Para.

This is metallic mercury. Always stored in porcelain, glass or iron containers. It is highly poisonous when ingested as such. It plays an important role in the medicinal chemistry and alchemy in India.

304. MICA :

Sanskrit	:	Abhraka.
Tamil	:	Appirakam.
Telugu	:	Abbarakam.

Kannada	:	Appirakam.
Malayalam	:	Abbarakam.
Hindi	:	Abrakh.

Two varieties of mica occur in the raw drug trade. The white one is muscovite and the black one biotite. Calx of mica is prepared by repeated calcinations and the product is esteemed as a remedy for debilitating diseases of the blood and nerves and the respiratory system.

305. **MOLLUGO CERVIANA :**

Sanskrit	:	Parpataka.
Tamil	:	Parpaatakam.
Telugu	:	Parpaatakarmu.
Kannada	:	Parpata.
Malayalam	:	Parpadagapullu.
Hindi	:	Pitpapda.

This consists of the whole herbs of **Mollugo cerviana** Ser. of the Molluginaceae. It is febrifuge, and antipyretic. Promotes flow of lochial discharges and is used as a cure for gonorrhoea.

306. **MOMIA :**

Please see—'Bituminous Momia'.

307. **MOON PLANT :**

Please see—'Sarcostemma'.

308. **MOUNTAIN EBONY—Purple :**

Please see—'Purple mountain ebony'.

309. **MOUNTAIN EBONY—White :**

Sanskrit	: Sweta kanchanara.
Tamil	: Kokku mandaarai
Telugu	: Tella moduga.
Kannada	:
Malayalam	: Malayagatti.
Hindi	: Kachnar.

This is *Bauhinia racemosa* Lam. of the Leguminosae. The bark is carminative and astringent. Used in diarrhoea and dysentery.

310. **MOUNTAIN EBONY—Yellow :**

Please see 'Yellow mountain ebony'.

311. **MUSK :**

Sanskrit	: Kastoori.
Tamil	: Kastoori.
Telugu	: Kastoori.
Kannada	: Kastoori.
Malayalam	: Kastoori.
Hindi	: Kastoori.

Musk is the dried secretion from the preputial follicles of the musk deer—*Moschus moschiferous*. It is a diffusible stimulant, aromatic, diuretic, antispasmodic and aphrodisiac. Contains a ketonic oil, muscone.

312. **MUSTARD :**

Sanskrit	: Sarshapa.
Tamil	: Kadugu.
Telugu	: Avalu.

Kannada	:	Saseva.
Malayalam	:	Katuku.
Hindi	:	Saraso.

This consists of the seeds of **Brassica nigra** Koch, of the Cruciferae. This is black mustard plant. White mustard is obtained from **Brassica alba** Rab. Both are rubefacient, vesicant, emetic and laxative in large doses. Contain essential oil and sinigrin.

313. NARDUS ROOT :

Please see 'Indian Spike Nard'.

314. NAGKESHAR STAMENS :

Sanskrit	:	Nagakeshara.
Tamil	:	Nagakesaram.
Telugu	:	Nagakesaram.
Kannada	:	Nagakesaram.
Hindi	:	Nagakesar.

This consists of the stamens of **Mesua ferrea** Linn. of the Guttiferae. The drug is aromatic. A scent is extracted from this. It is astringent, stomachic and useful in coughs. Contains essential oil and bitter principle mesuol.

However, in Madras State and the adjacent States two different materials are used as Nagakeshara. One consists of the tender fruits of **Cinnamomum wightii** Meissn. of the Lauraceae. This is called as Sirunagappoo in Tamil. The other is the fruits of **Dillenia pentagyna** Roxb. of the Dilleniaceae. It is known as Malabar nagakeshara.

315. NAIL DYE PLANT—Yellow :

Please see—'Yellow nail dye plant'.

316. NATIVE CALAMINE :

Please see—'Zinc Carbonate'.

317. NEEM :

Please see—'Margosa'.

318. NEGRO COFFEE :

Sanskrit	: Kasamarda.
Tamil	: Ponnaavaarai.
Telugu	: Kasinda.
Kannada	: Kasavati.
Malayalam	: Naathu thagarai, Ponnnaviram.
Hindi	: Kasoundi.

This is *Cassia occidentalis* Linn. of the Leguminosae. The plant, especially seeds are diuretic and laxative. Used externally in skin diseases. Contains emodin, oxymethyl-anthraquinones, toxalbumin, tannic acid, mucilage, fatty oil and chrysarobin.

319. NEGUNDO :

Sanskrit	: Nirgundi.
Tamil	: Nochehi.
Telugu	: Nochchi.
Kannada	: Nokki, Lakki.
Malayalam	:
Hindi	: Shambalu.

This is **Vitex negundo** Linn. of the Verbenaceae. Leaves tonic and vermifuge. The vapors from boiling leaves relieve cold, headache and fever. An oil prepared with this, useful in sinuses and scrofulous sores. Contains alkaloid nishidine and essential oil.

320. NIGELLA SEEDS :

Please see—'Black Caraway Seeds'.

321. NUT GRASS TUBERS :

Sanskrit	: Musta.
Tamli	: Koraikkizangu.
Telugu	: Tungamustalu.
Kannada	: Tungae hullu.
Malayalam	: Kora.
Hindi.	: Motha.

This consists of the rotund tuberous rhizomes of **Cyperus rotundus** Linn. of the Cyperaceae. The drug is diuretic, anthelmintic, diaphoretic, astringent, stimulant and aromatic. Contains essential oil with pinene, cineol etc. Contains also an alkaloid, and oleic, stearic and myristic acids.

322. NUT MEG :

Sanskrit	: Jatiphala.
Tamil	: Jaathikkai, Saadikkai.
Telugu	: Jatiphala.
Kannada	: Jatikkai.
Malayalam	: Jatikka.
Hindi	: Jaaphal.

This consists of the seed kernels of **Myristica fragrans** Houtt. of the Myristicaceae. The drug is stimulant and carminative. In large doses it is toxic and produces convulsions, due to the myristicin in them. Externally used in rheumatism. Contains volatile oil and solid fat. Volatile oil consists chiefly of terpenes together with myristicin, which possesses an intense odor of mace. Myristicin, $C_{11}H_{12}O_3$, is crystalline and toxic. The oil contains, besides myristicin, glycerids of myristic, palmitic and oleic acids.

323. **NUX POTATORUM :**

Sanskrit	: Kataka.
Tamil	: Thetrankottai.
Telugu	: Chilla.
Kannada	: Chilathabija.
Malayalam	: Thetta.
Hindi	: Nirmali.

This consists of the seeds of **Strychnos potatorum** Linn. f. of Loganiaceae. Used in gonorrhoea, dysentery, asthma and diabetes. The paste smeared on the interior of pots and filled with turbid water, causes the clearing of water. Hence called also as clearing nut. Contains Brucine.

324. **NUX VOMICA :**

Sanskrit	: Vishamushti.
Tamil	: Yettikkottai.
Telugu	: Vishamushti.
Kannada	: Kadasige.
Malayalam	: Kanniram, Vishamushti.
Hindi	: Kuchila.

These are the seeds of **Strychnos nux-vomica** Linn. of the Loganiaceae. Increases peristalsis and blood pressure. Toxic in large doses, producing convulsions, respiratory failure, asphyxiation and death. It is a stimulant of central nervous system. Usually contains about 3% total alkaloids, nearly half of which is strychnine and the rest mostly brucine. Contains also about 3% of fixed oil and also chlorogenic acid, formerly known as igasuric acid or caffeotannic acid.

325. OAK GALL :

Sanskrit	: Machika.
Tamil	: Maasikkaai.
Telugu	: Maachika.
Kannada	: Maachika.
Malayalam	: Maachika.
Hindi	: Maachika.

This consists of the galls developed on the oak -- **Quercus infectoria** Oliv. as a result of oviposition by a special insect, **Alderia gallaetinctoria** Oliv. The galls are rotund with small projections and are blueish grey in color. They're highly tanniniferous. Used as astringent; employed in the treatment of intertrigo, impetigo and eczema. Contains ellagic acid and penta digalloylglucose.

326. OLEANDER :

Sanskrit	: Karavira.
Tamil	: Arali, Kastoori pattai.
Telugu	: Gannaru.
Kannada	:
Malayalam	:
Hindi	:

This is *Nerium indicum* Mill. of the Apocynaceae. The whole plant is poisonous. Roots powerfully resolvent and attenuant used externally. As a paste used in venereal sores. Also useful in skin diseases and leprosy. Contains neriodorin, nereioderin, and karabin. Neriodorin and karabin are powerful cardiac poisons. Glucoside odorin causes paralysis and respiratory depression in rodents. Leaves contain a substance giving tests for rutin. The drug shows cardiotoxic potency and lethal dose comparable to digitalis.

327. **OLIBANUM :**

Please see—'Indian Olibanum'.

328. **OLIVE, SPURIOUS WILD :**

Please see—'Spurious Wild Olive'.

329. **OPERCULUM OF APPLE SNAIL :**

Please see—'Apple Snail Operculum'.

330. **OPIUM :**

Sanskrit	: Ahiphena.
Tamil	: Abini.
Telugu	: Nallamandu.
Kannada	: Aphimu.
Malayalam	: Apin.
Hindi	: Aphim.

Opium consists of the dried inspissated latex from the immature fruits of *Papaver somniferum* Linn. of the Papaveraceae. It is narcotic and sedative. Contains about

25 alkaloids the major ones being morphine, codeine, noscapine, papaverine and thebaine. Also contains meconic acid.

331. ORANGE JESSAMINE :

Sanskrit	: Maruvaka.
Tamil	: Simaikkonji.
Telugu	: Nagagolunga.
Kannada	:
Malayalam	:
Hindi	:

The source plant is *Murraya paniculata* Jack. of the Rutaceae. Leaves and flowers are useful in treating rheumatism, coughs and hysteria. Contains indole, murrayin, coumarin and essential oil. According to some texts, Maruvaka is Marjorana. Hence, please see—'Marjorana' also.

332. OTTO OF ROSES :

Sanskrit	: Attar.
Tamil	: Kadamba attar.
Telugu	: Kadamba attar.
Kannada	: Kadamba attar.
Malayalam	: Kadamba attar.
Hindi	: Kadamba attar.

This is a mixture of essential oils got from fragrant flowers; useful as a perfume and also for preparation of cosmetics.

333. OX :

This is the domesticated ox — *Bos taurus*. Its gall bladder (also cow's) is used in medicine.

334. PADDY :

Sanskrit	: Shaali.
Tamil	: Nell.
Telugu	: Vari.
Kannada	: Batta, Nelu.
Malayalam	: Nellu.
Hindi	: Dhan.

This is *Oryza sativa* Linn. of the Gramineae. Its roots, fruits and husk are used in medicine. Roots are diuretic and ash of husk is a fine abrasive constituent in tooth powders. The endosperm or rice is amyliiferous and nutritive.

335. PALMYRAH MALE INFLORESCENCE :

Sanskrit	: Taalapushapam.
Tamil	: Aanankai.
Telugu	: Thati puvu.
Kannada	: Tala huvu.
Malayalam	: Karimpana poovu.
Hindi	: Tad ka phool.

This consists of the inflorescence of the male plant of *Borassus flabellifer* Linn. of the Palmaceae. Useful in liver and spleen diseases.

336. PARCHED PADDY :

Sanskrit	: Lagam.
Tamil	: Nel pori.
Telugu	: Vari pelalu.
Malayalam	: Malaru.
Hindi	: Kheel.

It is a light article of diet for invalids and dyspeptics.

337. PEA :

Please see 'Field pea'.

338. PEACOCK :

Sanskrit	: Mayura.
Tamil	: Mayil.
Telugu	: Nemali.
Kannada	: Mayil.
Malayalam	: Mayil.
Hindi	: Mor.

This is **Pavo cristatus**, the national bird of India. The tail feathers of the male peacock, the flesh, bile and fat are medicinal.

339. PEARLS :

Sanskrit	: Mowktika.
Tamil	: Muththu.
Telugu	: Muthyam.
Kannada	: Mowktika.
Malayalam	: Muththu.
Hindi	: Mothi.

Pearls are formed in the pearl oyster shell. Its formation is initiated by the entry of any gritty particle, between the body of the animal and shell. Calcareous secretion from the animal encloses the rough particle and grows into a smooth lustrous body. Calx of pearls is stimulant, tonic and aphrodisiac. It is an antacid.

340. **PEARL OYSTER SHELL :**

Sanskrit	: Mukta sukti.
Tamil	: Muththuchippi.
Telugu	: Muthyapu chippa.
Kannada	: Muktinisimpu.
Malayalam	: Muttu chippi.
Hindi	: Moti ki sip.

This is the shell of **Pinctada margaritifera** Linn. the oyster which is the source of pearls.

341. **PEEPAL TREE :**

Sanskrit	: Aswatha.
Tamil	: Arasu.
Telugu	: Marri chettu.
Kannada	: Aswartha.
Malayalam	: Arayal.
Hindi	: Peepal.

This is the sacred fig tree—**Ficus religiosa** Linn. of the Moraceae. The bark is used as astringent in gonorrhoea and rheumatism. Useful also in scabies and other skin diseases.

342. **PELLITORY :**

Sanskrit	: Akarakarabha.
Tamil	: Akkirakaaram.
Telugu	: Akkalakarra.
Kannada	: Akrakara.
Malayalam	: Akrakara.
Hindi	: Akrakara.

This consists of the roots of *Anacyclus pyrethrum* DC. of the Compositae. It is cordial, stimulant and sialagogue. Useful in rheumatism. Contains pellitorine or pyrethrin and essential oil.

343. PEPPER :

Please see—'Black pepper'.

344. PHYLLANTHUS RETICULATUS :

Sanskrit	: Krishnakamboji.
Tamil	: Neerppullanji.
Telugu	: Niruri.
Kannada	: Niruri.
Malayalam	: Niruri.
Hindi	: Niruri.

Phyllanthus reticulatus Poir. belongs to the Euphorbiaceae. The leaves and bark are alterative and diuretic. Also useful in diarrhoea.

345. PHYLLANTHUS NIRURI :

Sanskrit	: Bhumiamlaki.
Tamil	: Keezhkai Nelli.
Telugu	: Nelausiri.
Kannada	: Nilanelli.
Malayalam	: Kilarnelli.
Hindi	: Bhui amla.

Phyllanthus niruri Linn. is used in dropsical affections as diuretic. Reported to be useful in jaundice. Used also in gonorrhoea and other urinogenital troubles. Roots are considered to promote sleep. Contains an alkaloid.

346. **PHYSIC NUT :**

Please see—'Bonduc Nut'.

347. **PICRORRHIZA :**

Sanskrit	: Katukarohini.
Tamil	: Kadugarogini.
Telugu	: Katukarohini.
Kannada	: Kedarkatuki
Malayalam	: Katukarohini.
Hindi	: Kutki.

This consists of the rhizome and roots of **Picrorrhiza kurren** Royle. ex Benth. of the Scrophulariaceae. It is a bitter cathartic. Used in preparations intended for dyspepsia, fever and in purgatives. Contains glucoside, picrorrhizin, bitter principle kutkin, nonbitter kurren and sterol kutkisterol.

348. **PIGEON :**

Sanskrit	: Kapota.
Tamil	: Puraa.
Telugu	: Pavuramu.
Kannada	: Pariya.
Malayalam	: Pravu.
Hindi	: Kabutar.

This is **Columba livia**. Flesh and blood used in rheumatic affections. Useful also in asthmatic conditions. Its gall bladder and bile are also used in medicine.

349. **PILLIPESARA :**

Sanskrit	: Mudgaparni.
Tamil	: Kaatupayaru.
Telugu	: Pillipesara, Karapesara.

Kannada	:	Narihesaru, Kahesaru.
Malayalam	:	Kattupayaru.
Hindi	:	Mugvan.

This is the herb of **Phaseolus trilobus** Ait. of the Leguminosae. It is sedative, tonic and antiperiodic.

350. PINE WOOD :

Sanskrit	:	Sarala.
Tamil	:	Sarala.
Telugu	:	Sarala.
Kannada	:	Sarala.
Malayalam	:	Sarala.
Hindi	:	Sarala.

This consists of the wood of **Pinus roxburghii** Sargent. of the Pinaceae. The wood is characteristically aromatic. It is stimulant, diaphoretic and antiseptic. Useful in cough, fainting and ulcerations. Contains essential oil with alpha and beta carene and alpha and beta pinene.

351. PIPER ARAUNTIACUS :

Sanskrit	:	Arenuka.
Tamil	:	Renuka.
Telugu	:	Renuka.
Kannada	:	Renuka.
Malayalam	:	Renuka.
Hindi	:	Renuka.

This consists of the fruits of **Piper arauntiacus** Wall. of the Piperaceae. The drug is bitter, acrid, aromatic and refrigerent. Sometimes fruits of some **Vitex** species are sold in the market as 'arenuka'.

352. PLANTAIN :

Sanskrit	: Kadali.
Tamil	: Vaazhai.
Telugu	: Avatti.
Kannada	: Baalae.
Malayalam	: Vaaza.
Hindi	: Kela.

This is *Musa paradisiaca* Linn. of the Musaceae. Also called as the banana. The roots and stems are astringent and anthelmintic. Juice of the sheaths and stem is useful in otalgia and haemoptysis. Ripe fruits are demulcent, nutritive and mildly laxative.

353. POMEGRANATE :

Sanskrit	: Dadima.
Tamil	: Maathulai.
Telugu	: Danimma.
Kannada	: Dalimba.
Malayalam	: Talimathalam.
Hindi	: Anaar.

This is *Punica granatum* Linn. of the Punicaceae. The bark is astringent, taenicide and anthelmintic. Fruit rind is useful in diarrhoea and dysentery. Fruit juice is cooling, refrigerent and cardiac. Bark and rind contain pelletierine, pseudopellitierine, isopellitierine and methyl pellitierine.

354. POPPY SEEDS :

Sanskrit	: Posta beeja, khasa beeja.
Tamil	: Kasakasa vidai.
Telugu	: Gasa gasalu.

Malayalam : Kasagasa.

Hindi : Posta.

This consists of the seeds of the opium poppy—**Papaver somniferum** Linn. of the Papaveraceae. The drug is mildly sedative, astringent, tonic and aphrodisiac. Useful in dysentery and diarrhoea. Contains small amounts of papaverine and morphine.

355. PORCUPINE :

Sanskrit : Salyaka.

Tamil : Mullam panri.

Telugu : Mulla pandi.

Malayalam : Mullanpanni.

Kannada : Elaya mriga.

Hindi : Salayi.

This is the wild Indian porcupine. Its gall bladder and bile are medicinal.

356. POTASSIUM CARBONATE :

Sanskrit : Yavakshara.

Tamil : Mara Vuppu, Lavaicharam.

Telugu : Yavaksharamu.

Kannada : Marada uppu.

Malayalam : Yavaksharam.

Hindi : Java-khar.

This is prepared from the ashes of the barley plant, and hence the name 'Yavakshara' in Sanskrit, meaning barley alkali. It is carminative, laxative, antacid, diuretic, expectorant and blood purifier. It is used in the diseases of the liver and spleen also.

357. **PREMNA ROOTS :**

Sanskrit	: Agnimantha moola.
Tamil	: Munnai ver.
Telugu	: Neli chettu.
Kannada	: Narubala.
Malayalam	: Munjna.
Hindi	: Arni.

This consists of the roots of **Premna integrifolia** Linn. (and other Premna species) of the Verbenaceae. The drug is stomachic and antiperiodic. Useful also as anti-rheumatic and in liver disorders. Contains alkaloids premnine and ganiarine. The former decreases contraction force of heart and also dilates pupils.

358. **PRICKLY CHAFF FLOWER :**

Sanskrit	: Apamarga.
Tamil	: Naayuruvi.
Telugu	: Uttareni.
Kannada	: Uttareni.
Malayalam	: Kadaladi.
Hindi	: Chirchira.

This is the herb of **Achyranthes aspera** Linn. of the Amarantacea. A. bidentata is also used. The material is diuretic, pungent, laxative and astringent. Useful in dropsy, piles, boils, skin eruptions and colic. Fruits are emetic and used in hydrophobia.

359. **PRICKLY MEXICAN POPPY :**

Sanskrit	: Swarnaksheeri.
Tamil	: Piramathandu.
Telugu	: Pichikusuna.

Kannada	:	Brahmadandi.
Malayalam	:	Brahmadandi.
Hindi	:	Brahmadandi.

This is *Argemone mexicana* Linn. of the Papavera-ceae. Laxative, expectorant and emetic. Poisonous in large doses. Juice used in jaundice, dropsy and skin diseases. Prolonged use of seed oil causes symptoms resembling epidemic dropsy. Alkaloids berberine and protopine are recorded.

360. PSORALEA SEEDS :

Sanskrit	:	Bakuchi.
Tamil	:	Karpokarisi.
Telugu	:	Bavanchalu.
Kannada	:	Vavuchige.
Malayalam	:	Karpogaari.
Hindi	:	Babchi.

This consists of the fruits of *Psoralea corylefolia* Linn. of the Leguminosae. Stomachic, deobstruent, anthelmintic, diuretic and diaphoretic. Used in leprosy, leucoderma and skin diseases. Contains essential oil, resin, a terpenoid oil, psoralen, isopsoralen and psoralidin. Psoralen and isopsoralen are active in leucoderma.

361. PUMPKIN WHITE :

Please see—'Ash gourd'.

362. PURIFICATION :

Sanskrit	:	Sodhana.
Tamil	:	Suddhi.
Telugu	:	Suddhi.

Kannada	: Suddhi.
Malayalam	: Suddhi.
Hindi	: Suddhi.

A number of drugs are taken through specific processes of mitigation, often called purification before being used in medicine. The fuller implications are not completely understood. However it is believed that the poisonous nature of drugs are got rid of and beneficial properties brought up.

—Please see appendix to **glossary**.

363. **PURPLE DATURA :**

Sanskrit	: Krishna datura.
Tamil	: Karuvoomaththai.
Telugu	: Nalla umetha.
Kannada	: Kariya madakunike.
Malayalam	: Karutta umattu.
Hindi	: Kala datura.

This is the common datura with purplish stems and flowers. Please see '**Datura**'.

364. **PURPLE MOUNTAIN EBONY :**

Sanskrit	: Rakta kanchanara.
Tamil	: Sivappu mandaarai.
Telugu	: Deva kanchana.
Kannada	: Kempu kanchavala.
Malayalam	: Malayakatti.
Hindi	: Kachnar.

This is **Bauhinia purpurea** Linn. of the Leguminosae. The bark is astringent and the root carminative. Used in diarrhoea. Contains gum and tannin.

365. **PUTRANJIVA :**

Please see 'Spurious wild olive'.

366. **QUININE SULFATE :**

This is obtained from **Cinchona** species. Causes contraction of nonpregnant uterus and sensitizes this muscle to oxytocin and therefore used in obstetrics. It also alleviates spasms of myotonia congenita through its action on muscles. Useful also in malarial fevers.

367. **RADISH :**

Sanskrit	: Mulaka.
Tamil	: Mullangi.
Telugu	: Seotidampa.
Kannada	: Moolangi.
Malayalam	: Mullangi.
Hindi	: Muli.

This consists of the tuberous roots of **Raphanus sativus** Linn. of the Cruciferae. It is diuretic, laxative and useful in piles and gastrodynic pains. Roots contain glucoside, enzyme and methyl mercaptan.

368. **RAISINS :**

Sanskrit	: Draksha.
Tamil	: Tiratchai.
Telugu	: Draksha.
Kannada	: Drakshe.
Malayalam	: Kodimunthiri, Munthiri.
Hindi	: Angoor.

This consists of the dried fruits of **Vitis vinifera** Linn. of the Vitaceae. The drug is sweet, demulcent, cooling, laxative and tonic. Useful in thirst, body heat, cough, voice hoarseness and consumption. Contains oxalic acid, malic acid, tartaric acid, racemic acids, glucose and traces of arsenic.

349. RATTAN CANE :

Sanskrit	: Vetra.
Tamil	: Pirambu.
Telugu	: Pernu.
Kannada	: Veta.
Malayalam	: Chooral.
Hindi	: Benth.

The stems and roots of **Calamus rotang** Linn. of the Palmaceae are used as antiperiodic and vermifuge. Also abortifacient.

370. RAUWOLFIA :

Sanskrit	: Sarpagandha.
Tamil	: Amalpori.
Telugu	: Chuvannavilpori.
Kannada	: Sarpagandha.
Malayalam	: Suvanamilpori.
Hindi	: Chotachand.

This consists of the roots and rhizomes of **Rauwolfia serpentina** Benth ex Kurz. of the Apocynaceae. Used in the treatment of insomnia, and insanity. It brings down blood pressure and depresses the central nervous system. Increases uterine contractions. Contains three series of alkaloids. (1) Weakly basic indole alkaloids. (2) Indoline alkaloids of intermediate basicity. (3) Strong anhydronium bases.

A total of 50 alkaloids are reported. The alkaloid reserpine is an antihypertensive and tranquillizer. Other principal alkaloids are rescinnamine, deserpidine and syrosingopine.

371. RAW ARECANUT :

Please see—'Arecanut - Raw'.

372. RED COTTON :

Sanskrit	: Karpasa.
Tamil	: Sivappupparutti.
Telugu	: Karpasamu, Rakta pathi chettu.
Kannada	: Rakta hathi.
Malayalam	: Chemparutti.
Hindi	: Lal-kapas.

This is **Gossypium arboreum** Linn. of the Malvaceae with red flowers. The roots, seeds and flowers are used in medicine. Useful in gonorrhoea, gleet and chronic cystitis.

373. RED LEAD :

Sanskrit	: Giri sindoora.
Tamil	: Sindooram, Vangachchindooram.
Telugu	: Sindooramu, Gānga sindooramu.
Kannada	: Girisindoora.
Malayalam	: Girisindoora.
Hindi	: Sindoor.

This is red oxide of lead. It is a local stimulant used in ointments for skin diseases and syphilis.

374. RED OCHRE :

Sanskrit	: Gairika.
Tamil	: Seemaikkaavikkallu.
Telugu	: Kavi.
Kannada	: Jajoo.
Malayalam	: Kavimannu.
Hindi	: Gerumitti.

A soft red calcareous earth with hydrous silicates of alumina. Refrigerent, absorbent, astringent and antidy-senteric. Useful in the treatment of inflammation of glands, ulcers and skin diseases and also dysentery.

375. RED ORPIMENT :

Please see—‘Arsenic realger’.

376. RED OXIDE OF MERCURY :

Sanskrit	: Rasasindoorā.
Tamil	: Rasachendooram.
Telugu	: Rasasindoorā.
Kannada	: Rasasindoorā.
Malayalam	: Rasasindoorā.
Hindi	: Rasasindoorā.

It is commercially prepared by oxidising mercury by heating with nitric acid until a reddish orange product results. It is reputed to be useful in the preparation of ointments for ulcers and chancres. However, Ekaguna sindoorā (Medicine - 180 in this book) is used in medicinal preparations wherever ‘Rasasindoorā’ is prescribed.

377. **RED SANDERS :**

Sanskrit	: Rakta chandana.
Tamil	: Senchandanam.
Telugu	: Yerra chandanamu.
Kannada	: Kempugandachakke.
Malayalam	: Rakta chandana.
Hindi	: Lal chandan.

This is the reddish, hard, inodorous astringent heart wood of **Pterocarpus santalinus** Linn. f. of the Leguminosae. It is tonic, cooling and astringent and improves eye sight. Contains red substances, santalin and deoxysantalin and three colorless crystalline substances.

378. **RED SILK COTTON :**

Sanskrit	: Rakta salmali.
Tamil	: Mul Ilavam.
Telugu	: Salmali (Booruga).
Kannada	: Elava.
Malayalam	: Ielavu.
Hindi	: Simul.

This is **Salmalia malabarica** Schott. & Endl. of the Bombacaceae. The roots are aphrodisiac as is the gum. Gum is demulcent, haemostatic and astringent. Useful in diarrhoea, dysentery and menorrhagia. Gum contains catechutannic acid. The mucilage appears to be a salico phosphoric ester of mannogalactan.

379. **RHINOCEROS :**

Sanskrit	: Kandamirugam.
Tamil	: Kandamirugam.
Telugu	: Kandamirugam.

Kannada	:	Kandamirugam.
Malayalam	:	Kandamirugam.
Hindi	:	Kandamirugam.

The horn of **Rhinoceros** is used in medicine.

380. **RHIZOMES :**

Rhizome means the underground stems of plants. Rhizomes used in medicine are ginger, turmeric etc.

381. **RHUBARB :**

Sanskrit	:	Revalchini.
Tamil	:	Revalchinikattai.
Telugu	:	Revalchini.
Kannada	:	Revalchini.
Malayalam	:	Revalchini.
Hindi	:	Rewardchini.

This consists of the roots and rhizomes of **Rheum emodi** Wall. **Rheum palmatum** Linn. and other species of **Rheum** belonging to the Polygonaceae. Contains anthraquinone derivatives, glucogallin, tannin and catechin. The anthraquinone derivatives are rhein, emodin, aloe-emodin, emodin monomethyl ether and chrysophanol. In small doses the drug is astringent and causes constipation due to the tannoid constituents. In higher doses it is purgative due to the anthraquinone derivatives and this is followed by an astringent effect.

382. **RICE WASH :**

Sanskrit	:	Tandulodaka.
Tamil	:	Kazhuneer.
Telugu	:	Beeyapukaduku.

Kannada	:	Akkigachiddare.
Malayalam	:	Arikkadi.
Hindi	:	Chaval dhovan.

To prepare this, soak raw rice in 8 volumes of water for six hours and wash the rice in the same water and decant and take the water.

383. **ROCK LICHENS :**

Sanskrit	:	Saileya.
Tamil	:	Kal paasi.
Telugu	:	Saileyamu.
Kannada	:	Kalahoo.
Malayalam	:	Kalpoovu.
Hindi	:	Bhoori chareela.

The drug consists of the thalli of lichens growing on rocks, chiefly they are species of **Parmelia**. Useful in diarrhoea, dyspepsia, spermatorrhoea, amenorrhoea and dysentery. Also diuretic.

384. **ROCK SALT :**

Sanskrit	:	Saindava lavana.
Tamil	:	Induppu.
Telugu	:	Saindava lavanamu.
Kannada	:	Saindavam.
Malayalam	:	Induppu.
Hindi	:	Sendha namak.

This is sodium chloride from salt mines.

385. **ROOTS OF FIVE GRASSES :**

Sanskrit	:	Panchatrunamoolam.
Telugu	:	Panchatrunamoolam.
Telugu	:	Panchatrunamoolam.

Kannada	: Panchatrunamoolam.
Malayalam	: Panchatrunamoolam.
Hindi	: Panchatrunamoolam.

This consists of the roots of :

1. The paddy plant — **Oryza sativa** Linn.
2. The sugar cane — **Saccharum officinarum** Linn.
3. The cotton grass — **Imperata cylindrica** Beauv.
4. The dog bamboo — **Saccharam spontaneum** Linn.
5. The dhub grass—**Desmostachya lipinnata** Stapf.

Reputed as diuretic drugs singly or in combination.

386. ROSARY NUTS :

Sanskrit	: Rudraksham.
Tamil	: Rudraksham.
Telugu	: Rudraksham.
Kannada	: Rudraksham.
Malayalam	: Rudraksham.
Hindi	: Rudraksham.

This consists of the fruits of **Elaeocarpus ganitrus** Roxb. of the Elaeocarpaceae. Used in the diseases of head and in epileptic fits.

387. ROSE APPLE :

Sanskrit	: Jambu.
Tamil	: Naaval.
Telugu	: Nerudu.
Kannada	: Nerilu.
Malayalam	: Gnaval.
Hindi	: Jaamoon.

This is *Syzygium cumini* Skeels. of the Myrtaceae. The bark is astringent, given in diarrhoea. Fruit is carminative, cooling and diuretic. Seeds used in diabetes. Seeds contain a glucoside, essential oil and ellagic acid. Alkaloid jambosine is recorded. Aquous extract of seeds shows marked and prolonged decrease in blood sugar upon hypodermic injection into dogs. Oral administration showed no effect.

388. ROSE WATER :

Sanskrit	: Satapatrakam.
Tamil	: Panneer.
Telugu	: Gulabi arkamu.
Kannada	:
Malayalam	:
Hindi	: Ark-e-Gulab.

The rose water available in commerce is used.

389. ROUND ZEDOAEEY :

Sanskrit	: Kastoore nisha.
Tamil	: Kastoore manjal.
Telugu	: Kasturi pasupu.
Kannada	: Kasturi arisina.
Malayalam	: Kasturi mannal.
Hindi	: Jangli haldi.

This consists of the rhizomes of *Curcuma aromatica* Salisb. of the Zingiberaceae. The drug is cooling, diuretic, aromatic, stimulant and antiseptic. Contains essential oil.

390. RUDRAKSHA :

Please see—'Rosary Nuts'.

391. **RUE :**

Please see—'Garden rue'.

392. **SACRED BASIL :**

Sanskrit	: Tulasi.
Tamil	: Tulasi.
Telugu	: Tulasi.
Kannada	: Tulasi.
Malayalam	: Tulasi.
Hindi	: Tulasi.

This is *Ocimum sanctum* Linn. of the Labiatae. The leaves are expectorant, diaphoretic, antiperiodic, stimulant and stomachic. Useful in cold, cough, fevers, disorders of urinogenital system and hepatic affections of children. Contains essential oil with eugenol, carvacrol, methyl eugenol and caryophyllone.

393. **SAFFRON :**

Sanskrit	: Kumkuma kesara.
Tamil	: Kungumappoo.
Telugu	: Kumkuma kesaram.
Kannada	: Kumkuma kesaram.
Malayalam	: Kumkuma kesaram.
Hindi	: Zafron.

The drug consists of the dried stigmas with part of style, of *Crocus sativus* Linn. of the Iridaceae. Used in fevers, meloncholia, liver enlargement, catarrhal affections and skin diseases. In over dose it is narcotic. Contains glucosides crocin, crocetin and picrocrocin with an essential oil. Carotenes and lycopene are also present.

394. SAGE LEAVED ALANGIUM :

Sanskrit	: Ankoia.
Tamil	: Azinjil.
Telugu	: Udugu chettu.
Kannada	: Ankolae mara.
Malayalam	: Ankolam.
Hindi	: Akola.

This is *Alangium salvifolium* Wang. of the Alangia-
ceae. Usually the roots are used as anthelmintic, purga-
tive and diaphoretic. Useful also in skin diseases. Poultice
of leaves used in rheumatism. The fruits are also used.
The plant contains a number of alkaloids. Alangine re-
duces blood pressure temporarily and increases peristal-
sis.

395. SAHASRA VEDI :

Sanskrit	: Sahasra vedi.
Tamil	: Sahasra vedi.
Telugu	: Sahasra vedi.
Kannada	: Sahasra vedi.
Malayalam	: Sahasra vedi.
Hindi	: Sahasra vedi.

This is a stone. Unidentified.

396. SAL AMMONIAC :

Sanskrit	: Navasagara.
Tamil	: Navacharam.
Telugu	: Navasaramu.
Kannada	: Navasaram.
Malayalam	: Navasaram.
Hindi	: Newsadar.

This is **Ammonium Chloride**. It is expectorant, cholagogue and alterative in small doses. In larger doses purgative. It stimulates mucosa, relieves hepatic congestions. Used also in dropsy. Used in urinary disorders, especially when urine is full of lithates.

397. SALT PETRE :

Sanskrit	: Surakshara.
Tamil	: Pottiluppu.
Telugu	: Potluppu, Surekaramu.
Kannada	: Patluppu.
Malayalam	: Vedyuppu.
Hindi	: Sorakalmi.

This is **potassium nitrate**. It is diuretic, refrigerent and diaphoretic. Reduces frequency of pulse. In higher doses it is irritant. Useful also in dropsy, smallpox, measles, influenza, catarrh, gonorrhoea, acute rheumatism and bleeding from lungs and other internal organs caused by fever.

398. SAL TREE RESIN :

Sanskrit	: Sarjarasa.
Tamil	: Venkungiliyam.
Telugu	: Sarjarasamu, Thella guggilamu.
Kannada	: Sarjarasa.
Malayalam	: Chengalyam.
Hindi	: Raal.

This is the resinous exudate obtained from **Shorea robulsta** Gaertn. f. of the Dipterocarpaceae. The drug is mildly astringent, stimulant and aphrodisiac. Heated with

fixed oils it forms plasters, that are applied to chilblains, ulcers etc. A paste of it put on the head is a cure for elongated uvula.

399. SANDAL WOOD :

Sanskrit	: Chandana.
Tamil	: Sandanam.
Telugu	: Chandanam.
Kannada	: Chandanam.
Malayalam	: Chandanam.
Hindi	: Chandan.

This consists of the odoriferous heart wood of **Santalum album** Linn. of the Santalaceae, collected from trees growing above 2,500' above sea level. The wood and oil therein are used as stimulant and disinfectant of urinogenital and bronchial tract. The wood astringent, sedative, diuretic and cooling. Sandal wood oil is not secreted in any special cells or glands of the wood. The oil contains about 90% of santanol, an aromatic alcohol.

400. SAPPAN WOOD :

Sanskrit	: Patanga.
Tamil	: Patangam.
Telugu	: Patangam.
Kannada	: Patangam.
Malayalam	: Patangam.
Hindi	: Patangam.

This is the wood of **Caesalpinia sappan** Linn. of the Leguminosae. Useful in atonic diarrhoea and dysentery. Given internally in skin diseases. It is a powerful astringent. Contains a dye and essential oil.

401. **SARCOSTEMMA :**

Sanskrit	: Somalata.
Tamil	: Somam.
Telugu	: Somalata.
Kannada	: Somalata, Somavalli.
Malayalam	: Somalata, Somavalli.
Hindi	: Somalata, Somavalli.

This is a cladodic Asclepiadaceous plant—**Sarcostemma acidum** Voigt. Plant is cooling, a'terative and acid in taste. According to some people, 'Somalata' is **EPHEDRA GERARDIANA** Wall. Its action resembles adrenalin but is more prolonged. It raises blood pressure. Contains alkaloid ephedrine.

402. **SCORPION TAIL PLANT :**

Sanskrit	: Vrischikali.
Tamil	: Thalekodukkuppoondu.
Telugu	: Tekkudigai.
Kannada	: Haligilu.
Malayalam	: Tekkica.
Hindi	: Hatisund.

This is the herb of **Heliotropium indicum** Linn. of the Boraginaceae. Plant diuretic. Juice useful in granular growths in eyelids. Contains an alkaloid.

403. **SCREW PINE :**

Please see—'Fragrant screw pine'.

404. **SEA COCONUT :**

Sanskrit	: Aklari.
Tamil	: Kadalthengai.
Telugu	: Samudrapu tenkaya.

Kannada	:	
Malayalam	:	Kadal tenna.
Hindi	:	Daryaka nariyal.

This is the kernel of **Ledoicea maldivica** Pers. of the Palmaceae. Considered tonic and febrifuge. Used to check diarrhoea and vomiting in cholera. Alexipharmic. Decoction believed to be useful in diabetes.

405. SENNA :

Sanskrit	:	Swarnamukhi patra.
Tamil	:	Nilaavaarai.
Telugu	:	Sonnamuki.
Kannada	:	Sonamakhi.
Malayalam	:	Soorattu nilavarai.
Hindi	:	Senna makhi.

This consists of the leaflets of **Cassia angustifolia** Vahl. of the Leguminosae. The drug is a purgative. The fruits are also used as purgative. Sennosides A and B are the laxative principles. Fruits contain oxymethyl anthraquinone. Leaves contain calcium oxalate, flavanols, isorhamnetin, kaempferol, rhein and emodin. Some essential oil is also present.

406. SESAME OIL AND SEEDS :

Sanskrit	:	Tilataila, Tila.
Tamil	:	Nallennai, Yell.
Telugu	:	Nuvvulu noone, Nuvvulu.
Kannada	:	Taila, Yelu.
Malayalam	:	Nallenna, Yellu.
Hindi	:	Til ke tel, Till.

Sesame oil is expelled from the seeds of **Sesamum indicum** Linn. of the Pedaliaceae. Seeds emollient, tonic, diuretic, lactagogue and emmenagogue. Oil is refrigerant and demulcent. Oil contains sesamol.

407. **SIDA :**

Please see **Bala roots**.

408. **SILVER :**

Sanskrit	: Rajata.
Tamil	: Velli.
Telugu	: Vendi.
Kannada	: Belli.
Malayalam	: Velli.
Hindi	: Chaandi, Rupya.

This is metallic silver. As a calx it is tonic stimulant and aphrodisiac. Indicated in male sterility, leucorrhoea, menorrhagia, chest pains and excessive heat in the body.

409. **SIRISH FLOWERS :**

Sanskrit	: Sirisha pushpa.
Tamil	: Usilam poo.
Telugu	: Sirisha pushpamu.
Kannada	: Sirasu.
Malayalam	: Nemnani vaka.
Hindi	: Sirish ka phool.

This consists of the flowers of **Albizzia amara** Boivin. of the Leguminosae. Used in the piles and other ailments of the alimentary tract, and inflammations, boils and ulcers.

410. **SIRISSA BARK :**

Sanskrit	: Sirisa twak.
Tamil	: Vaagai pattai.
Telugu	: Dirisina.
Kannada	: Baagae.
Malayalam	: Vaaka.
Hindi	: Siris ka chaal.

This is the bark of **Albizzia lebbeck** Benth. of the Leguminosae. Useful as an astringent in diarrhoea.

411. **SISSO TREE :**

Sanskrit	: Simsupa.
Tamil	: Eetti.
Telugu	: Errasissoo, Jittarega.
Kannada	: Biridee.
Malayalam	: Iruvil, Kariya ibidu.
Hindi	: Sisham.

This is **Dalbergia sissoo** Roxb. of the Leguminosae. Leaves are bitter and used in gonorrhoea. Bark used in leprosy, boils and eruptions. Contains tannin.

412. **SIX SPICES :**

Sanskrit : Shatooshnam.

Shatooshnam means six hot drugs. They are the following :

1. Long pepper.
2. Long pepper roots.
3. Lead wort root.
4. Dry ginger.
5. Black pepper.
6. Black pepper root.

413. SMALL CALTROPS :

Sanskrit	: Gokshura.
Tamil	: Nerunchil.
Telugu	: Chinipalleru.
Kannada	: Neggilu.
Malayalam	: Nerinjil.
Hindi	: Chota ghokru.

This consists of the spinous fruits of *Tribulus terrestris* Linn. of the Zygophyllaceae. The drug is cooling and diuretic. Useful in calculous affections, painful micturition and gout. Contains traces of an alkaloid, essential oil, fixed oil, resins and nitrates.

414. SMALL CASHMERE TREE

Sanskrit	: Kashmari.
Tamil	: Sirukumizham.
Telugu	: Nelaponna.
Kannada	: Seevane.
Malayalam	: Nilakkumizh.
Hindi	: Choti gamari

This is *Gmelina asiatica* Linn. of the Verbenaceae. The roots are demulcent, alterative, astringent and slightly aromatic. Used in gonorrhoea, rheumatism, and catarrh of the bladder. Contains a glucoside.

415. SMOOTH VOLKAMERIA :

Sanskrit	: Pootigandha.
Tamil	: Pinari.
Telugu	: Pishinika.
Kannada	: Kundali.
Malayalam	: Nirnochchi.
Hindi	: Lonjai.

This is *Clerodendrum inerme* Gaertn. of the Verbenaceae. The root is useful in the treatment of rheumatism. Contains bitter principle, resin and gum.

416. SOUR KANJEE OR SOUR GRUEL :

Sanskrit : Amlakanjika.
Tamil : Puliththa kanji.

Any gruel could be made sour by keepnig it sealed in a vessel for seven days or until it is sour. It is filtered before use.

417. SOCHAL SALT :

Sanskrit : Sawarcha lavanam.
Hindi : Sowchar non.

This salt is prepared by the following method. A saturated solution of Sodium carbonate is prepared and sodium chloride is added to this until it is saturated with this salt. The solution is then filtered and evaporated to obtain salt crystals. A chemical analysis by Chunekar. of the market sample shows that the salt contains Sodium chloride, soda sulf and sodium hydroxide. He states that it does not contain sodium carbonate. The salt is carminative and laxative.

418. SOWARCHA LAVANA :

Please see—'Sochal salt'.

419. SPIKE NARD :

Please see—'Indian spike nard'.

420. **SPINOUS FIRE BRAND TREE :**

Sanskrit	: Agnimantha.
Tamil	: Munnai.
Telugu	: Nelachettu.
Malayalam	: Munna.
Kannada	: Eegigida. Narubala.
Hindi	: Arani.

This consists of the roots of **Premna integrifolia** Linn. of the Verbenaceae. The drug is useful in neuralgia, rheumatism, fever, flatulence and liver complaints. It contains two alkaloids. Premnine decreases contraction force of heart and dilates pupils. The other alkaloid is ganiarine.

421. **SPREADING HOG WEED :**

Sanskrit	: Punarnava.
Tamil	: Mookkirattai.
Telugu	: Galijeru.
Malayalam	: Tiludamma.
Kannada	: Gajjeru.
Hindi	: Tikhri.

The drug consists of the roots of **Boerhaavia diffusa** Linn. of the Nyctaginaceae. The drug is a diuretic, laxative, expectorant and stomachic. Useful in oedema, anaemia, jaundice, ascites, anasarca, scanty urine and inflammation. Contains alkaloid punarnavine. Intravenous injection of the alkaloid in cats produces marked diuresis and distinct and persistent rise in blood pressure. In some places the roots of species of **Trianthema** of the Aizoaceae are used.

422. SPURIOUS WILD OLIVE :

Sanskrit	: Putranjiva.
Tamil	: Puttira seevi.
Telugu	: Kuduru jivi.
Malayalam	: Pongalam.
Kannada	: Putrajive.
Hindi	: Putranjiva.

This consists of the seeds of **Putranjiva roxburghii** Wall. of the Euphorbiaceae. Used in colds and fevers. They are believed to be productive of impregnation. Contains an oil with glycerides of certain acids and sitosterol.

423. SQUARE SPURGE :

Sanskrit	: Snuhi.
Tamil	: Chaturakkalli.
Telugu	: Bommajimudu.
Malayalam	: Chaturakkalli.
Kannada	: Bonthae kalli, Nivingu.
Hindi	: Sehund.

This is **Euphorbia antiquorum** Linn. of the Euphorbiaceae. The juice and latex of the plant are purgative, irritant, insecticidal and parasiticial. Useful as a purgative, and in rheumatism, nervine diseases, dropsy, palsy, deafness, warts and cutaneous affections. Contains euphorbin. Saline extract of the plant shows antibiotic activity.

424. SQUARE STALKED VINE :

Please see—'Adament creeper'.

425. STAG'S HORN :

Plase see—'Antlers of deer'.

426. STAFF TREE SEEDS :

Please see—‘Climbing bitter sweet’.

427. STAR ANISE FRUIT :

Sanskrit	: Takkola.
Tamil	: Anashippoo.
Telugu	: Anasapovu.

This consists of the fruits of *Illicium verum* Hook. f. the Illiciaceae. The drug is stomachic and carminative. It is highly aromatic. Contains essential oil with anethol.

428. STEEL :

Sanskrit	: Loha.
Tamil	: Eghu.
Telugu	: Erumu.

Metallic steel is meant. Usually called iron.

429. SUGAR CANE (& CANDY) :

Sanskrit	: Ikshu.
Tamil	: Karumbu.
Telugu	: Cheraku.
Kannada	: Kabu.
Malayalam	: Karimbu.
Hindi	: Ganna.

Sugar cane is *Saccharum officinarum* Linn. of the Graminae. Its juice is sweet and nutritive. The roots are diuretic. Contains sucrose and calcium oxalate. From the juice, jaggery, sugar candy and sugar are produced.

430. SULFATE OF COPPER:

Please see—'Copper sulfate'.

431. SULFUR :

Sanskrit	: Gandhaka.
Tamil	: Kandagam.
Telugu	: Kandagam.
Kannada	: Kandagam.
Malayalam	: Kandagam.
Hindi	: Gandak.

This is elemental sulfur. It is fungicidal, insecticidal and parasiticial. Useful in skin diseases. It is an essential ingredient in mercury preparations.

432. SWEET FLAG :

Sanskrit	: Vacha.
Tamil	: Vasambu.
Telugu	: Vasa.
Kannada	: Vacha.
Malayalam	: Vayambu.
Hindi	: Bach.

This consists of the dry rhizomes of *Acorus calamus* Linn. of the Araceae. The drug is emetic, stomachic, expectorant, antibiotic and insecticidal. Useful in dyspepsia, colds, bronchitis, fevers and skin diseases. Contains glucoside acorin, alkaloid and essential oil.

433. SWEET SMELLING HARE FOOT :

Sanskrit	: Prishniparni.
Tamil	: Orilai.
Telugu	: Kolaponna.

Kannada	:	Nariyala vona.
Malayalam	:	Orilai.
Hindi	:	Pitvan.

This consists of the roots of **Uraria lagopoides** DC. of the Leguminosae. Alterative, tonic and anticatarrhal. It is said to produce abortion even in the seventh month of pregnancy.

434. **TAMARIND :**

Sanskrit	:	Tintrini.
Tamil	:	Puli.
Telugu	:	Chinta.
Kannada	:	Huli, Hunise.
Malayalam	:	Puli, Kolpuli.
Hindi	:	Amli, Imli.

This is **Tamarindus indica** Linn. of the Leguminosae. The fruit pulp is refrigerent, digestive, carminative, and laxative. It is useful in diseases caused by deranged bile. Leaf and bark are useful in rheumatic pains and swellings. The fruit contains traces of oxalic acid, 10% free tartaric acid, 8% acid potassium tartarate, 25 to 45% invert sugar and some tannin. Its acidity varies from 11 to 16 percent.

435. **TANNER'S CASSIA :**

Sanskrit	:	Talapotaka.
Tamil	:	Aavaarai.
Telugu	:	Tangaedu.
Malayalam	:	Aavaara.
Kannada	:	Aavaarae.
Hindi	:	Turver.

This is *Cassia auriculata* Linn. of the Leguminosae. The bark is astringent. Leaves and fruits are anthelmintic, and useful in skin diseases also. Seeds useful in ophthalmia, conjunctivitis, diabetes and chylous urine. Bark contains nearly 20% tannin. Vitamin-P also is present.

436. TARTARIC ACID :

Commercial tartaric acid is used.

437. TELLICHERRY BARK & SEEDS :

Sanskrit	: Kutaja twak, Kutaja beeja.
Tamil	: Kudasappaalaippattai, Kudasappaalai vidai.
Telugu	: Kodasappaala.
Kannada	: Kodachage.
Malayalam	: Kudagappaalai.
Hindi	: Kurchi.

The source plant is *Holarrhena antidysenterica* Wall. of the Apocynaceae. Bark and seeds are astringent, antiperiodic and febrifuge. Highly useful in diarrhoea and dysentery. Contains alkaloids conessine, conessimine, isoconessimine, conamine, conimine, conarrhimine, holarrhimine, kurchine and kurchicine. Total alkaloid percentage about 4.5.

438. THE TEN ROOTS :

Sanskrit	: Dasamoola.
Tamil	: Dasamoola.
Telugu	: Dasamoola.

Kannada : Dasamoola.
 Malayalam : Dasamoola.
 Hindi : Dasamoola.

This consists of the following ten different roots :

1. Unifoliate tick trefoil—Saliparni—
Desmodium gangeticum DC.
2. Sweet smelling hare foot—Prishniparni—
Uraria lagopoides DC.
3. Jacquin's night shade—Kantakari—
Solanum xanthocarpum Schrad. & Wendl.
4. Indian night shade—Brihati—
Solanum indicum Linn.
5. Small caltrops—Gokshura—
Tribulus terrestris Linn.
6. Bael—Vilva—
Aegle marmelos Corr.
7. Premna root—Agnimantha—
Premna integrifolia Linn.
8. Indian trumpet flower—Syonaka—
Oroxylum indicum Vent.
9. Yellow flowered fragrant trumpet flower—
 Patala—
Stereospermum tetragonum DC.
10. Cashmere tree—Kashmari—
Gmelina asiatica Linn.

The combination is stomachic, carminative and antiperiodic.

439. TERAMNUS LABIALIS :

Sanskrit	: Mashaparni.
Tamil	: Kaatulundu.
Telugu	: Moyyakuponna.
Malayalam	: Kaattulunu.
Hindi	: Mashoni.

This consists of the herb of *Teramnus labialis* Spreng. of the Leguminosae. It is astringent, febrifuge and stomachic. Useful in the diseases of the nerves and paralysis, and also rheumatism. Considered valuable in catarrh and haemoptysis also.

440. TESTA OF TAMARIND SEEDS :

This consists of the dark seed coat of the seeds of tamarind. It is diuretic, and astringent.

441. THATCH GRASS :

Please see—'Roots of five grasses'.

442. THREE LEAVED CAPER :

Please see—'Crataeva'.

443. THREE PUNGENTS :

Sanskrit	: Trikatu.
Tamil	: Trikatu.
Telugu	: Trikatu.
Kannada	: Trikatu.
Malayalam	: Trikatu.
Hindi	: Trikatu.

This consists of the following three pungent drugs :

1. Dry ginger.
2. Long pepper.
3. Black pepper.

444. THREE SALTS :

Sanskrit	: Lavanathrayam.
Tamil	: Lavanathrayam.
Telugu	: Lavanathrayam.
Kannada	: Lavanathrayam.
Malayalam	: Lavanathrayam.
Hindi	: Lavanathrayam.

This consists of the following three salts :

1. Rock salt.
2. Sochal salt.
3. Vit salt.

445. THYME LEAVED GRATIOLA :

Sanskrit	: Nirbrahmi.
Tamil	: Piramivazhukkai.
Telugu	: Brahmi.
Kannada	: Kirubrahmi.
Malayalam	: Cheriya prami.
Hindi	: Chotibrahmi.

This is the herb of **Bacopa monnieri** Pennel. of the Scrophulariaceae. Used in nervine debility, asthma, epilepsy, insanity and hoarseness. It is diuretic and aperient. Contains alkaloids brahmine and herpestine. It is also known as Bacopa herb.

446. **TIGER :**

Sanskrit	: Vyagra.
Tamil	: Puli.
Telugu	: Pedda puli.
Kannada	: Kuli.
Malayalam	: Kaduva.
Hindi	: Bag.

This is **Felis tigris** Linn. Its bile is used in medicine. Its fat is reputed to be of use in rheumatism, and leprosy.

447. **TIN :**

Sanskrit	: Vanga.
Tamil	: Velleeyam.
Telugu	: Tellasisamu.
Kannada	: Tavaray.
Malayalam	: Kalang.
Hindi	: Kathal.

This is metallic Stannum. Used in diseases of the urinogenital system and lungs. Given as calx. Useful also in boils and ulcers that are infected by bacterii.

448. **TINOSPORA :**

Sanskrit	: Gudoochi.
Tamil	: Seendil.
Telugu	: Thippa teega.
Kannada	: Amritaballi.
Malayalam	: Amrita valli.
Hindi	: Giloi.

Tinospora cordifolia Miers. and **T. malabarica** Miers. are used. They belong to the Menispermaceae. The thick stems and roots are employed in medicine. The

drug is bitter, stomachic, antiperiodic, antipyretic and aphrodisiac. Useful as tonic, in chronic diarrhoea and dysentery and also gonorrhoea. Contains berberine, giloin and giloinin and some bitter principles.

449. **TORTOISE :**

Sanskrit	: Kurma.
Tamil	: Aamai.
Telugu	: Thabelu, Thambelu.
Kannada:	
Malayalam :	
Hindi	:

The shell of the tortoise of various terrestrial species are used in the form of a calx in medicine. It is highly calcareous.

450. **TRUE KAPOK TREE :**

Please see—'Kapok tree true'.

451. **TURMERIC :**

Sanskrit	: Haridra.
Tamil	: Manjal.
Telugu	: Pasupu.
Kannada	: Arisina.
Malayalam :	Mannal.
Hindi	: Haladi.

Consists of the rhizomes of *Curcuma longa* Linn. of the Zingiberaceae. The drug is aromatic, stimulant, tonic, carminative, antiperiodic, anthelmintic and anti-biotic. Contains alkaloid curcumin and essential oil.

Choleretic action of the essential oil is attributed to p-tolylmethyl carbinol. Dye stuff acts as a cholagogue causing the contraction of gall bladder. The antioxidant properties of turmeric are due to phenolic character of curcumin.

452. **TURPITH :**

Please see—'Black turpith'.

453. **TWO ALKALIES :**

Sanskrit	: Ksharadwayam.
Tamil	: Ksharadwayam.
Telugu	: Ksharadwayam.
Kannada	: Ksharadwayam.
Malayalam	: Ksharadwayam.
Hindi	: Ksharadwayam.

This consists of two alkaline materials :

1. Potassium carbonate.
2. Sodium carbonate.

454. **TWO NIGHTSHADES :**

Sanskrit	: Brihatee dwayam.
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This consists of the two Solanums :

1. Indian nightshade—*Solanum indicum* Linn.
2. Jacquins night shade —*Solanum xanthocarpum*
Schrad. Wendl.

455. **TWO SANDAL WOODS :**

Sanskrit	: Dwichandana.
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Sandal wood (*Santalum album* Linn.) and Red sanders wood (*Pterocarpus santalinus* Linn. f.) are used.

456. **TWO SARSAPARILLAS :**

Sanskrit : Saribadwayam.

Consists of the roots of **Hemidesmus indicus** R.Br and **Ichnocarpus frutescens** R.Br.

457. **TWO WILD GRAMS :**

Sanskrit : Dwiparni.

This consists of the herbs of **Teramnus labialis** Spreng. and **Phaseolus trilobus** Ait.

458. **UNIFOLIATE TICK TREFOIL :**

Sanskrit : Saliparni.

Tamil : Sirupulladi.

Telugu : Gitanaram.

Hindi : Sarivan.

This is the herb of **Desmodium gangeticum** DC. of the Leguminosae. It is antidyenteric, antidiarrhoeal and galactagogue. Useful also in convulsions.

459. **VAIKRANTH :**

Sanskrit : Vaikrantha.

Tamil : Vaikrantham.

This is a mineral drug occurring in the form of white transparent regular crystals of varied sizes. It is regarded as a form of quartz. Major part is silica.

460. **VALERIAN—INDIAN :**

Please see—'Indian valerian'.

461. **VENOM OF BLACK COBRA :**

Sanskrit	: Krishna sarbha visha.
Tamil	: Karunaaga nachchu.
Telugu	: Nallathasupamu visham (garalam)

This consists of the venom of the cobra of India. The venom when pressed out from the sacs through the fangs is clear yellow and later crystallizes. For the uses please see medicine number 289 in this book.

462. **VETIVER :**

Sanskrit	: Useera.
Tamil	: Vettiver.
Telugu	: Vetiveru.
Kannada	: Kas-kas.
Malayalam	: Kas-kas.
Hindi	: Kas-kas.

This consists of the roots of *Vetiveria zizanioides* Nash. of the Graminae. The roots are aromatic and bitter. The drug is refrigerent, febrifuge, diaphoretic, stimulant, stomachic and emmenagogue. Contains an essential oil with a ketone fraction varying from 20 to 90%.

The drug is white. To differentiate this from another aromatic drug with a scent similar to this, this drug is called white vetiver and the latter as black vetiver. Black vetiver consists of the roots of *Coleus vetiveroides* K. C. Jacob. of the Labiatae. This is cultivated in the State of Kerala. It is equated with the Sanskrit name 'Hreebera'. In Tamil and Telugu it is known as **Kuruver.**

463. **VETIVER BLACK and VETIVER WHITE :**

Please see—'Vetiver'.

464. **VIKRANTH :**

Please see—'Vaikranth'.

465. **VIT SALT :**

Sanskrit	:	Bida lavanam.
Tamil	:	Bida lavanam.
Telugu	:	Bida lavanam.
Kannada	:	Bida lavanam.
Malayalam	:	Bida lavanam.
Hindi	:	Bida lavanam.

This is an artificial salt, with a variegated purplish black color and the smell of burnt buffalo horns. It occurs in commerce as large rocky lumps. Two methods are adopted for its preparation.

Method I.

Materials required :

Potassium nitrate	1000 gms.
Common alumn	150 gms.
Buffalo horn	500 gms.

Method of preparation :

Heat potassium nitrate in a pan. When it melts, add horn chips little by little and mix with continued heating. This forms a viscous mass. Cool this, powder and dissolve in four volumes of water. Put alumn into this and dissolve, with heating. When solution is complete, decant and discard the sediment. Boil the solu-

tion until viscous and then pour into a sheet in a mat, or shallow pan and allow to cool and solidify. The solid obtained is bidalavana. This appears to be the market material.

Method II.

Materials required :

Powder of Common salt	450 gms.
Powder of embolic myrobalanz	12.5 gms.

Method :

Mix the powders well. Divide into four equal parts. Heat one part in a pan on an oven until it blackens. Add the next part and heat. Thus use all the remaining mixture. Keep the material to cool. This is bidalavana. It is powdery. Used in the treatment of indigestion, constipation and enlargement of liver and spleen.

466. WATER CHEST-NUT :

Sanskrit	: Singataka.
Tamil	: Singarakkottai.
Telugu	: Kubyakam.
Kannada	: Singhara.
Malayalam	: Karimpolam.
Hindi	: Singhara.

This consists of the seeds of **Trapa bispinosa** Roxb. of the Onagraceae. The kernels are used. The drug is tonic, aphrodisiac, and cooling. Used in spermatorrhoea, leucorrhoea, diarrhoea and debility.

467. WATER :

Sanskrit	: Jala.
Tamil	: Neer.
Telugu	: Neelu.

Kannada	: Neeru.
Malayalam	: Vellam.
Hindi	: Paani, jal.

Water used in the preparation of medicines must be clean, clear and potable. One has to be very careful in selecting water for medicinal use because, in the preparation of Asavas, unwanted organisms may enter the vat if dirty water is used and spoil the preparation and contaminate. In the preparation of arkas on an industrial scale, only soft water must be used. Otherwise the still will be spoiled by the formation of fur and result in improper distillation and corrosion of vessel. When distilled water is recommended no other water should be used.

468. WATER LILY :

Sanskrit	: Utphala.
Tamil	: Alli.
Telugu	: Alli.
Kannada	: Aambal.
Malayalam	: Aambal.
Hindi	: Chotakamal.

Water lilies belong to the genus **Nymphaea** of the Nymphaeaceae. The species or varieties may differ in flower color. It may be white, blue, violet, red, rose or yellow. They possess astringent and sedative properties, and contain alkaloids.

469. WHEY :

Please see—'Curd and curd supernatant'.

470. WHITE ARSENIC :

Sanskrit	: Shankha vihsa.
Tamil	: Vellai paasaanam.
Telugu	: Tella pashana.
Kannada	: Sankha pashana.
Malayalam	: Sankha pashana.
Hindi	: Sankhya.

This is arsenic trioxide, a poison. It is astringent, antipyretic and antiasthmatic. Useful in gastrointestinal disorders, asthma, rheumatism and skin diseases.

471. WHITE ASPHALT :

Sanskrit	: Karpooora silajat.
Tamil	: Karpooora silajat.
Telugu	: Karpooora silajat.
Kannada	: Karpooora silajat.
Malayalam	: Karpooora silajat.
Hindi	: Karpooora silajat.

This is Gypsum. Used in diseases of the urinary system. It is hydrous calcium sulfate. Two other varieties of gypsum in crystalline and fibrous form are known as kalnar in Tamil. They are selenite and satin spar respectively.

472. WHITE CUTCH :

Please see—'Cutch'.

473. WHITE DEAD NETTLE :

Sanskrit	: Dronapushpi.
Tamil	: Thumbai.
Telugu	: Tumbichettu.

Kannada	: Tumba.
Malayalam	: Tumba.
Hindi	: Tumba.

This is *Leucas aspera* Spreng. of the Labiatae. It is antipyretic, expectorant and insecticide. Useful also in skin diseases. Contains essential oil and glucoside.

474. WHITE FIG :

Sanskrit	: Plaksha.
Tamil	: Kurugu, Ichchi.
Telugu	: Basseri, Juvi.
Kannada	: Juvi.
Malayalam	: Tsjakela.
Hindi	: Pilkhan.

This is *Ficus lacer* Buch. - Ham. of the Moraceae. The bark is astringent. Used in leucorrhoea and as gargle in salivation.

475 WHITE PEPPER :

Sanskrit	: Swetamaricha.
Tamil	: Venmilagu.
Telugu	: Tella miriyalu.
Kannada	: Belle menasu.
Malayalam	: Ven milagu.

This is decorticated black pepper. Properties and uses similar to black pepper.

476. WHITE TURPITH :

Please see—'Leptadenia' and 'Black turpith'.

477. WILD BLACK GRAM :

Sanskrit	: Mashaparni.
Tamil	: Kaattulundu.
Telugu	: Mashaparni.
Kannada	: Mashaparni.
Malayalam	: Mashaparni.
Hindi	: Mashaparni.

This consists of the complete plants of *Teramnus labialis* Spreng. of the Leguminosae. Sometimes the seeds alone are used. It is astringent, stomachic and febrifuge. Used in paralysis, rheumatism and haemoptysis.

478. WILD DATE FRUIT :

Sanskrit	: Kshudra parooshaka.
Tamil	: Chitreenthil.
Telugu	: Sanna etha.
Kannada	: Chikka eeche.
Malayalam	: Chittendil.
Hindi	: Palawat.

This is *Phoenix farinifera* Roxb. of the Palmaceae. The fruits are astringent and diuretic as are the roots and the tender shoot.

479. WILD DRUM STICK :

Sanskrit	: Vanasigru.
Tamil	: Kaattumurungai.
Telugu	: Adavimunaga.
Kannada	: Adavi nugge.
Malayalam	: Katu murinna.
Hindi	: Janglishajna

This is *Moringa concanensis* Nimmo. of the Moringaceae. Properties and uses same as that of Drumstick.

480. WILD FIG :

Sanskrit	: Udumbara.
Tamil	: Aththi.
Telugu	: Aththi.
Kannada	: Aththi.
Malayalam	: Aththi.
Hindi	: Gular.

This is *Ficus racemosa* Linn. of the Moraceae. The bark, root and fruit are astringent. Used in diabetes, diarrhoea, menorrhagia, piles and haemoptysis. Contains tannin.

481. WILD GREEN GRAM :

Please see—Pillipesara.

WILD LIQUORICE :

Sanskrit	: Gunja.
Tamil	: Kunri.
Telugu	: Guruvenda.
Kannada	: Gu'ganji.
Malayalam	: Kunni.
Hindi	: Gunj.

This consists of the roots of the crab's eye plant, *Abrus precatorius* Linn. of the Leguminosae. It is sometimes used to adulterate the real liquorice roots, as the appearance and taste are somewhat alike. Its seeds are emetic, purgative and poisonous. The roots are emetic and alexiteric. The seeds contain abrin, a toxalbumin. Contains also glucosides and alkaloid abrine.

483. WILD SNAKE GOURD :

Sanskrit	: Patola.
Tamil	: Peyppudal.
Telugu	: Kommupotla.
Kannada	: Kaadupadvala.
Malayalam	: Patolam.
Hindi	: Jangli chachinda.

This consists of the herb of *Trichosanthes dioica* Roxb. of the Cucurbitaceae. It is febrifuge and laxative. Also anthelmintic. *Trichosanthes cucumerina* Linn. is also used.

484. WILD SPURIOUS OLIVE :

Please see 'Spurious wild olive'.

485. WILD TOBACCO :

Sanskrit	: Devanala.
Tamil	: Kaattuppugayilai.
Telugu	: Adavi pogaku.
Malayalam	: Kaatupukayila.
Hindi	: Nala.

This consists of the leafy shoots of *Lobelia nicotianaefolia* Hey. of the Lobeliaceae. The drug is antispasmodic. Contains alkaloid lobeline.

Some people use *Nicotiana plumbaginifolia* of the Solanaceae.

486. WITHANIA ROOTS :

Sanskrit	: Aswagandha.
Tamil	: Amukkurakkilangu.
Telugu	: Pennaru gadda.

Kannada	: Pennaeru.
Malayalam	: Aswagandhi.
Hindi	: Asgand.

This consists of the tuberous roots of **Withania somnifera** Dunal. of the Solanaceae. The drug is alterative, aphrodisiac, tonic, deobstruent, diuretic, and antiperiodic. Used in rheumatism, consumption, emaciation, and sexual debility. A number of alkaloids have been isolated. The drug emits an ammoniacal odor resembling the smell of horse's urine.

In some places, the roots of **Withania coagulans** Dunal. are used. These are thinner than the roots of **W. somnifera** Dunal.

487. **WOOD APPLE :**

Sanskrit	: Kapitha.
Tamil	: Vilaamara.
Telugu	: Velamakaye.
Malayalam	: Vilaam.
Kannada	: Belaa.
Hindi	: Kaveet.

This is of **Feronia limonia** Swingle. of the Rutaceae. It is astringent, stomachic, stimulant and carminative. Bark is prescribed in biliousness.

488. **YELLOW FLOWERED FRAGRANT TRUMPET FLOWER :**

Sanskrit	: Patala.
Tamil	: Paadiri.
Telugu	: Tagada.

Malayalam :	Paadiri.
Kannada :	Bilipaadiri.
Hindi :	Paral.

This is *Stereospermum suaveolens* DC. of the *Bignoniaceae*. The roots are used as cooling, diuretic, tonic and febrifuge. Contains bitter substance. It is one of the 'Ten roots'.

489. YELLOW MOUNTAIN EBONY :

Sanskrit :	Aswamantaka.
Tamil :	Kanchini.
Telugu :	Kanchini.
Malayalam :	Kanjanam.
Kannada :	Vanasampage.
Hindi :	Kachnar.

This is *Bauhinia tomentosa* Linn. of the *Leguminosae*. The roots are used as anthelmintic and in the inflammation of liver.

490. YELLOW NAIL DYE PLANT :

Sanskrit :	Sahachara.
Tamil :	Chemmulli.
Telugu :	Mullugoranta.
Malayalam :	Semmulli.
Kannada :	Mullugoranta.
Hindi :	Satsaraya.

This is *Barleria prionitis* Linn. of the *Acanthaceae*. The roots are used as febrifuge and expectorant. Used in dropsy, cough, anasarca and fever. Contains an alkaloid. Whole plant is rich in potassium.

491. **YELLOW ORPIMENT :**

Sanskrit	: Haritala.
Tamil	: Talakam.
Telugu	: Talakam.
Malayalam	: Talagam.
Kannada	: Ardāla.
Hindi	: Hartala.

This is arsenic trisulfide. It is yellow in color. Occurs in two forms, one as lumps and the other as flakes. It is poisonous, emmenagogue, antiperiodic, alterative and depilatory. Used in incipient phthisis, asthma, paraplegia, hemiplegia, monoplegia, facial paralysis, gonorrhoea, epilepsy, dropsy and skin diseases.

492. **YELLOW SANDAL WOOD :**

Please see—'Sandal wood'.

493. **YELLOW WOOD SORREL :**

Sanskrit	: Charngeri.
Tamil	: Puliyaarai.
Telugu	: Pulichinta.
Malayalam	: Puliyaral.
Kannada	: Pullampurachi soppu.
Hindi	: Aamrul saak.

This is the herb of **Oxalis corniculata** Linn. of the Oxalidaceae. It is sour, cooling, stomachic and anti-scorbutic. Employed in the treatment of scurvy. Contains oxalic acid, and oxalates of potassium and calcium.

494. **ZERUMBET ZEDOARY :**

Please see—'Camphor zedoary'.

495. ZINC CARBONATE :

Sanskrit	: Rasaka, Kharpara.
Tamil	: Paalthuthutham.
Telugu	: Rasakam, Kharparam.
Malayalam	: Rasakam, Kharparam.
Kannada	: Rasakam, Kharparam.
Hindi	: Rsaakam, Kharparam.

Also called as native calamine or calamine. The drug is whitish, brittle, tasteless and insoluble in water. A proportion of zinc sulfate occurs admixed. It is used a nervine tonic, alterative, antipyretic and anti-microbial. Employed in the treatment of fever, gonorrhoea, leucorrhoea, ulcers and skin diseases.

APPENDIX TO GLOSSARY—1

Purification Processes for Certain Drugs.

1. **ACONITE** (Nabhi) :

Process from Sahasrayoga.

Soak the drug pieces in cow's urine for three days, changing the urine every day. Dry them in the sun. Put in a cloth bag, suspend in cow's urine and boil for six hours. Wash the pieces in water and dry.

2. **ARSENIC PENTA SULFIDE** (Gowripashana) :

Process from Rasaratnasamuchaya.

Suspend the drug in a cloth bag into bitter gourd plant juice and boil for eight hours. Wash in water and dry.

3. **BITUMINOUS MOMIA** (Gomootra silajat)....

Dissolve the drug pieces in a decoction of three myrobalans and discard the insoluble matter. Filter and boil until a solid mass is obtained.

The above process, as it involves heating, is known as "Agnitapisilajat" in Ayurveda. There is another method where no boiling is involved but the solar insolation is made use of. The product, hence, is known as "Sooryatapi silajat". This is done by dissolving the drug in water and filtering it and then placing the solution in sunlight to evaporate the water. As the water is lost gradually, a scum is formed on the surface of the solution. This is carefully removed and put into an iron vessel with water, kept in the sun, and dissolved to

similarly recover it. Thus, the dissolved drug in the first solution is all recovered by successive transfers to four iron vessels kept in the sunlight. The final product is thoroughly dried in sunlight.

4. **CALOMEL** (Rasakarpooa) :

Process from Sahasrayoga.

Soak the drug pieces in a mixture of black pepper decoction and betle leaf juice for three days and then wash in water and dry.

5. **CINNABAR** (Hingula) :

Process from Basavarajeeya.

Grind the drug in lime juice until the glistening property is lost.

6. **CONCH SHELLS** (Sankha) :

Process from Basavarajeeya.

Soak pieces in lime juice for a day, wash in water and then dry.

7. **COPPER** (Tamra) :

Process from Rasaratna samuchaya.

Make a paste of rock salt by grinding with some lime juice and smear it over the copper foils. When dry, heat to redness and plunge into Negundo leaf juice. Repeat this process six more times. Then boil the copper foils in cow's urine for three hours and wash in water.

8. COPPER PYRITIES :

Process from Rasaratnasamuchaya.

Heat crystals on an iron pan until red hot. Immediately put them into a decoction of three myrobalans. Repeat the process six more times.

9. COPPER SULFATE (Mayooratutha) :

Process from Basavarajeeya.

Grind crystals with sour curd totally dehydrate placing it on an earthen disc. to obtain a powder.

10. CORALS (Pravala) :

Process from Basavarajeeya.

Soak in lime juice for three hours, wash and dry.

11. COWRIE SHELLS (Varatika) :

Process from Basavarajeeya.

Soak the pieces in lime juice for one day, wash and dry.

12. CROTON SEEDS (Dantibeeja) :

Process from Basavarajeeya.

Break open the seeds and collect the cotyledons discarding the embryonic plant. Suspend the cotyledons in a cloth bag into a solution of cowdung and boil slowly for four hours. Allow to cool and collect the cotyledons. Wash and dry them in sun. Then subject them to similar treatment using solution of cane jaggery and cow's milk. Finally, wash, dry and fry in ghee.

13. **DATURA SEEDS** (Daturabeeja) :

Process from Ayurvedaprakasa.

Soak seeds in cow's urine for twelve hours and wash. Then gently pound to remove the husky exterior, dry and take for use.

14. **DROSS IRON** (Mandoora) :

Process from Rasaratnasamuchaya.

Heat pieces on a pan until red hot. Immerse in cow's urine. Do this seven times.

15. **GLORIOSA TUBERS** (Longali) :

Process from Ayurvedaprakasa.

Soak pieces in cow's urine for a day, wash in water and dry.

16. **GREEN VITREOL** (Kaseesa) :

Process from Basavarajeeya.

Soak in lime juice before use.

17. **GYP SUM** (Karpoorasilajat) :

Process from Rasaratnasamuchaya.

Grind with decoction of cardamoms.

18. **INDIAN BDELLIUM** (Guggulu) :

Process from Dhanvantarinighantu.

Dissolve the drug in three myrobalan decoction by heating. Filter and discard insoluble matter. Heat until semisolid. Place on a mat in small bits and dry in the sun.

19. **IRON** (Loha) :

Process from Basavarajeeya.

Heat iron filings until red hot. Remove from oven and immediately pour some sesame oil on them with due caution. The oil goes off into flames. Stir with a rod until the flames subside. Repeat this six more times. Wash the treated filings and boil with a decoction of bark of gum arabic tree.

20. **LEAD** (Naga) :

Process from Sahasrayoga.

Melt the metal and pour into a mixture of a paste of square stalked vine and goat's urine and sesame oil, with due care and caution. Recover the metal and repeat the process nine more times.

21. **LOAD STONE** (Kantha) :

Process from Rasaratnasamuchaya.

Heat pieces red hot and plunge into a decoction of three myrobalans. Do this seven times.

22. **MARKING NUTS** (Bhallataka) :

Process from Sahasrayoga.

Cut the nuts into four pieces without coming into contact with the seed oil. Soak for three days in cow dung solution. Wash with cold water and then with coconut water and then dry.

23. **MERCURY** (Parada, Rasa) :

Process from Rasatarangini.

Grind 100 gms. of mercury with 100 gms. lime stones for three days. Strain and recover mercury. Put this

in an iron retort, heat and recover mercury. They grind it with 100 gms. of garlic and 50 gms. of rock salt until black. Then press and separate mercury from this mass and wash in hot water. Dry in sun and strain through a cloth to remove any foreign matter.

24. MERCURIC CHLORIDE (Sowveera) :

Process from Gunapadam.

Steam the drug with coconut water mixed with camphor. Keep in the sun to dry.

25. MICA (Abhraka) :

Process from Rasaratnasamuchaya.

Heat pieces until red hot and plunge into cow's urine. Do this seven times.

26. NUX VOMICA SEEDS :

Process from Basavarajeeya.

Cut the seeds into four pieces. Boil with decoction of Amaranthus roots. Dry in sun and fry in ghee.

27. OPIUM (Ahiphena) :

Process from Bhaishajyratnavali.

Dissolve in pure water and filter. Add some cow's milk and heat into a plastic mass. Place this in a dish and cover with ginger juice. Allow the juice to evaporate of its own accord. Treat thus with ginger juice six more times.

28. **RED ORPIMENT** (Manassila) :

Process from Rasaratnasamuchaya.

Steam with lime water for four hours, wash and dry.

29. **SULFUR** (Gandhaka) :

Process from Rasaratnasamuchaya.

Prepare an earthen vessel with an iron sieve mesh at the mouth. This should be a concave sieve to hold pieces of sulfur and the mouth of the vessel should be as wide as possible. Select a domelike lid to cover the mouth of the vessel. Pour cow's milk into the vessel, place the sieve at the mouth and place on it pieces of sulfur and heap. Then cover with the lid and seal the rims with cloth ribbon and mud plaster. Bury this set-up upto the neck of the vessel in a pit. Then over the dome, place cow dung cakes and burn. The sulfur melts and drips into the milk and solidifies in the form of pearly spheres or styloid tears. When the set up is cool, open the vessel and collect the sulfur in the milk. Repeat this process seven more times, using fresh milk every time. Usually, a fine tough cloth is used instead of a sieve and this cloth is supported by a few wires from below. The cloth will not burn and be destroyed, because the melting point of sulfur is only 130 degrees centigrade. Wash the final product and dry.

30. **TIN** (Vanga) :

Process from Sahasrayoga.

Melt the metal and cautiously pour into mahua oil containing some sal ammoniac. Recover the metal and repeat this process six more times.

31. **VAIKRANT STONES** (Vaikrantha) :

Process from Rasaratnasamuchaya.

Heat the crystals on low fire and dip in horse's urine. Do this seven times and wash and dry.

32. **WHITE ARSENIC** (Shankha visha) :

Process from Rasaratnasamuchaya.

Treatment the same as for Arsenic penta sulfide.

33. **YELLOW ORPIENT** (Talaka) :

Process from Rasaratnasamuchaya.

Treatment the same as for Red orpiment.

34. **ZINC** (Jasada) :

Process from Rasaratnasamuchaya.

Melt the metal and cautiously pour into mahua oil mixed with some sal ammoniac. Recover, remelt and repeat the process twenty more times.

35. **ZINC CARBONATE** (Rasaka) :

Process from Basavarajeeya.

Suspend the drug pieces put into a cloth bag, over lime water and steam the drug by boiling the water. Dry the treated drug.

